

Deborah L. McGuinness, PhD



Tetherless World Senior Constellation Chair
Professor of Computer Science and Cognitive Science
Rensselaer Polytechnic Institute

USA citizen; Clearance (on request)
Social Security # (on request)
<http://www.cs.rpi.edu/~dlm>

dlm@cs.rpi.edu
518-276-4404 phone
518-276-4464 Fax
Twitter: @dlmcguinness

Professional Preparation

Duke University	Computer Science	B.S.	1980
	Mathematics	B.A.	1980
	With Highest Honors		
University of California, Berkeley	Computer Science	M.S.	1981
Thesis Title:	An Inferencing Language for Relational Geometric Databases		
Advisor:	Dr. Eugene Wong		
Rutgers University	Knowledge Representation	Ph.D.	1997
Thesis Title:	Explaining Reasoning in Description Logics		
Advisor:	Dr. Alex Borgida		

Professional Experience

2007- pres	Tetherless World Constellation (Endowed) Chair Rensselaer Polytechnic Institute, Troy, NY Professor of Computer Science Professor of Cognitive Science Founding Director of the Web Science Research Center (2008-pres) Director Health Analytics, IDEA
1998-pres	CEO McGuinness Associates (Small Woman-Owned Consulting Business)
2006- 2007	Acting Director and Senior Research Scientist – Knowledge Systems, Artificial Intelligence Laboratory, Stanford University, Stanford, CA
2004- 2006	Co-Director and Senior Research Scientist – Knowledge Systems, Artificial Intelligence Laboratory, Stanford University, Stanford, CA
1998-2004	Associate Director and Senior Research Scientist - Knowledge Systems Laboratory Stanford University, Stanford, CA;

- 1995-1998 Principal Member of Technical Staff - Artificial Intelligence Principles Research Department - Information Systems and Services Research- AT&T Laboratories Research
- 1985-1995 Member of Technical Staff- Artificial Intelligence Principles Research Department - Information Systems and Services Research- AT&T Bell Laboratories. Rotational management position from '96-97 as Emerging Technologies and Opportunities District Manager, Personal Online Services, AT&T Strategy and New Service Innovation.
- 1980-1985 Member of Technical Staff, AT&T Bell Laboratories Home Information Systems (80-84), Computing Environments and Artificial Intelligence (84-85)

Professional Service

Advisory Roles

- Gowild: Technology advisor for a technology company combining artificial intelligence with virtual reality and animation, comics, and games. (2016-present)
- Franz Inc.: Technology advisory board member for a technology company with expert knowledge in developing and deploying Semantic Web technologies and providing Common Lisp based tools that offer an ideal environment to create complex, mission-critical applications. (2009-present)
- Orbmedia: Technology advisory board member for a non-profit next generation journalism company focused on producing world-class journalism that strengthens global understanding of the interdependent world. (2011-present)
- Qualcomm: Advisor and consultant to the context aware mobile computing team. (2011-2012)

Expert Witness

Served as a consultant for numerous patent litigation cases, most of which are not public. I have testified in court, been deposed in legal offices, helped with due diligence, Markman hearing preparation, expert report preparation, deposition preparation and execution, and trial preparation and execution. Recently I have also helped prepare requests for post issuance review. I have worked on validity and infringement cases and have represented claimants and defendants.

I served as an expert testifying witness in the Versata (Trilogy) vs. Sun Microsystems Civil Action No 2:06-CV-358-TJW case. I worked for Sun through the Skadden, Arps, Slate, Meagher & Flom legal firm. I authored an 800 page expert witness report, which succeeded in eliminating numerous claims from the suit, including one entire patent. I was deposed in this case and then further served as a testifying invalidity witness. Versata sought more than 100 million in damages and I helped the Sun side win the case, which was decided on April 27, 2009.

<http://www.eweek.com/c/a/Application-Development/Sun-Successfully-Defends-Itself-Against-100M-Patent-Suit-694198/>

Previous Technical Advisory Boards (helped through acquisition)

- Applied Semantics: A knowledge organization solutions company. Acquired by Google in 2003.
- Blue Chip Expert: Technology advisory board member for a startup company supporting semantically-enabled fulfillment of executive and contract search requests. (bluechipexpert.com)
- Guru Worldwide: A new-generation staffing company. (www.guru.com) Acquired by Unicru (now www.kronos.com).
- Cerebra: Member of founding technology advisory board for a semantic web solutions company. Assisted in funding as well as technical aspects and supported due diligence prior to asset acquisition by WebMethods.
- Radar Networks – Member of the founding technology advisory board (2003-2010) for a startup company concerned with providing technology to support the next generation of the web, sometimes called Web 3.0. Additionally, helped obtain funding from Vulcan Capital to capitalize the company and supported due diligence during acquisition by EVRI in 2010.
- Tumri - Technology advisory board member for a context-oriented online content startup company.
- Katalytik - Technology advisory board member for a startup company concerned with improving healthcare through better health information technology.

Executive Council Member / Advisory Board / Leadership Team (Academic):

- Smithsonian Encyclopedia of Life Advisory Board, 2013-present
- DataOne: (2011-present) – Senior leadership team member for first and largest NSF DataNet award. Co-Chair of the Interoperability and Semantics Working group.
- NIST Ontology Summit Advisory Board – (2008-2012). Appointed to advise on ontology research issues for annual ontology summit.
- Information and Communication Technology for Sustainable and Optimised Building Operation Scientific Advisory Board (2009-2011)– University College, Cork, Ireland.
- Oregon State University Ecosystem Informatics Division: (2006-2009 Phase 1 and 2009-2011 Phase II) - Appointed advisory position for an interdisciplinary informatics division supporting ecosystem research. (<http://oregonstate.edu/leadership/strategic-plan/informatics>)
- Semantic Web Science Association. (2000-2006) - Founding advisory board member for the organization promotes scholarly work on the semantic web internationally. The organization oversees the international semantic web conference series, related conference proceedings, and the journal of web semantics. (<http://swsa.semanticweb.org/>)

- American Association for Artificial Intelligence (1998-2002) - Elected advisor for the scientific society devoted to advancing scientific understanding of the mechanisms underlying thought and intelligent behavior and their embodiment in machines. This organization oversees and sponsors the yearly AAAI and IAAI conference series, two major yearly symposium series, multiple other scientific workshops, a quarterly magazine, and the affiliated AI Journal. (aaai.org)
- International Organization for Knowledge Representation and Reasoning. (2001-2004) - Appointed advisory board member for the scientific organization that fosters research and communication on knowledge representation and reasoning. The organization oversees the yearly international conference series, related proceedings, and KR-related mailing lists. (kr.org)
- International Organization for Description Logics, (2001-2003) - Elected steering committee member for the organization responsible for supporting research in description logics. The organization oversees the yearly description logic workshop, affiliated publications, and maintains online resources concerning description logics. (dl.kr.org)
- International Organization for Conceptual Structures, (2001-2003) Appointed editorial board member for the organization that promotes research on the formal analysis and representation of conceptual knowledge with applications to artificial intelligence, computational linguistics, and related areas of computer science. The organization also oversees a yearly international conference series, related publications, and online resources.

Conference Program Chair/Co-Chair:

[Web Science](#), Albany NY, 2017 (title confirmed; conference yet to be held).

[Conference on Information and Knowledge Management](#), Lisbon, Portugal, November, 2007

[American Association for Artificial Intelligence Conference](#), San Jose, Ca. July 2004

[International Knowledge Representation and Reasoning Conference](#), Toulouse France, April 22-25, 2002

Selected Workshop General / Program Chair/Co-Chair:

[International Provenance and Annotation Workshop](#), General Chair, Troy, NY, June 14-17, 2010.

Proof Combination and Evaluation Workshop at the International Joint Conference on Automated Reasoning (IJCAR), 2010

[Linked AI: AAAI Spring Symposium on Linked Data Meets Artificial Intelligence](#), Stanford, CA, March 22-24, 2010.

[Semantic Scientific Knowledge Integration, AAAI Spring Symposium](#), Stanford, CA, March 26-28, 2008.

[Earth and Space Science Cyberinfrastructure: Application and Theory of Knowledge Representation](#) the American Geophysical Union Joint Assembly Fall Meeting, San

Francisco, CA, December 11-15, 2006.

[Contexts and Ontologies: Theory, Practice, and Applications](#). Riva del Garda, Italy. August 28, 2006.

[Earth and Space Sciences Ontology Workshop](#), Johns Hopkins University, Applied Physics Lab, Laurel, MD., May 26, 2006.

[Semantic Scientific Data Integration](#), the American Geophysical Union Joint Assembly, Baltimore, Maryland, May 23-25, 2006.

Volcano Ontology Workshop. San Diego Super Computer Center, San Diego, Feb 15-16, 2006. (Results to be presented at AGU06, May 2006).

[Ontologies for Earth and Space Sciences](#), Earth and Space Science Informatics. American Geophysical Union Fall Meeting, Moscone Center, San Francisco, December 8, 2006.

[Contexts and Ontologies: Theory, Practice, and Applications](#). AAAI Workshop, Pittsburgh, Pa., July 2005.

[IEEE Enterprise Distributed Object Computing Conference, Model-Driven semantic Web \(MDSW 2004\)](#). Monterey, Ca., September 2004.

[Workshop on Configuration](#), International Joint Conference on Artificial Intelligence, Seattle, Washington, August 6, 2001.

[International Description Logic Workshop](#), August 1-3, 2001, Stanford, CA., USA

[International Semantic Web Workshop](#), July 30-31, 2001, Stanford, CA., USA . This was the first meeting of the international semantic web community and it has now turned into a conference series called the International Semantic Web Conference, which has been held every year since 2002.

AAAI Fall Symposium Series Workshop on Configuration, Boston, Mass., November, 1996,

1996 International Workshop Description Logics, Boston, Mass., November, 1996,

AAAI Fall Symposium Series Workshop on Issues in Description Logics: Users Meet Developers, Boston, Mass., 1992.

Selected Organizing Committee (other than program or conference chair):

[International Semantic Web Conference 2002](#). Sardinia, Italy. Sponsor Chair, June 2002.

[Knowledge Representation and Reasoning 2000](#) Breckenridge, Colorado, Local Arrangements Chair USA, April, 2000.

Journal Associate or Guest Editor:

[Journal of Earth Science Informatics](#) (JESI - Springer), Founding Associate Editor, 2006-present.

[IEEE Intelligent Systems](#), Special Issue Editor on Semantic Scientific Knowledge Integration, 2009 24(1)

Information Systems Journal on Information and Knowledge Management, guest editor, 2009.

[ACM transactions on Internet Technology](#). Associate Editor, 2002-2006

[Electronic Transactions in Artificial Intelligence](#). Area editor for SEMWEB (Modeling Semantics of Web Information: Theory, Methods, and Applications), 2000-2001.

[AI-EDAM Journal](#), Special Issue on Configuration, Guest Editor, 1998.

Journal for Conceptual Systems, Special Issue on Knowledge Retrieval, Use, and Storage for Efficiency, Guest Editor, 1997.

Member

W3C [Provenance Working Group](#). 2011 –2014. Founding member and editor of the ontology recommendation note.

NASA Technology Infusion Working Group, 2007-present

W3C [Provenance Incubator group](#). 2010-2011. Founding member of the group that led to the working group on provenance.

W3C [OWL Working Group](#). 2007 – 2012. Founding member and editor of one of the recommendation documents.

W3C [Semantic Web Best Practices Working Group](#). 2004-2006. Task Force Chair or Co-Chair for [Ontology Engineering and Patterns](#).

Darpa Executive Committee for Cyc Analysis - 2003-2005.

W3C [Web Ontology Working Group](#). 2001-2005. Lead author of the [Overview](#) for the W3C Ontology Web Language Recommendation, co-author of the [Guide](#) and [Reference](#), and co-author of the [W3C submission](#).

[Joint EU/US Adhoc Markup Language Committee](#) - 2000-2005,

Knowledge Representation System Specification group of the DARPA Knowledge Sharing Effort, 1990-1994,

ARPA Knowledge Sharing Committee Effort on Interfaces to the External Environment, 1990-1992,

AAAI - Association for the Advancement of Artificial Intelligence, 1984-present,

AAAS – American Association for the Advancement of Science,

ACM - Association for Computing Machinery, 1988-present,

AGU – American Geophysical Union, 2001-present

ESIP – Earth System Information Partners, 2006-present

IEEE – Institute of Electrical and Electronics Engineers

New York New Media Association, 1997-2000,

Industrial Gifts:

MITRE, \$150,000 2015-2016 (Joint with Hendler)

Qualcomm, \$135,000 from 2011-2013

LGS Innovations, \$50,000, 2011

Elsevier, \$ 10,000, 2011

VerticalNet, \$ 60,000, 2001-2004

Cisco, \$100,000, 2000

Kodak, postdoctoral support – about \$150,000 2006-2007

Grants

L. Schadler, D. McGuinness, K. Brinson, W. Chen. DIBBS: Ontology and Cyberinfrastructure for Polymer Nanocomposite Community Data Resource. From the National Science Foundation (NSF). 500,000. 9/16-3/19. This project aims to expand the NanoMine resource for nanomaterials and provide an integrated semantic infrastructure and data resource for all those interested in designing and using nano materials.

J. Samuels, P. Fox, J. Hendler, R. Hull, D. McGuinness. Data-Driven Design Paradigm for Part Qualification in Additive Manufacturing. From the Defense Advanced Research Projects Agency (DARPA). 400,000. 6/16 – 3/17. This project aims to provide a semantic infrastructure data resource for Additive Manufacturing

S. Teitelbaum, C. Gennings, P. Kovatch, D. McGuinness. Child Health Exposure Analysis Repository Data Center. From National Institute of Environmental Health Sciences (NIH/NIEHS). 1,238,595. This is the RPI portion of the overall award to Mount Sinai. 9/1/15-8/31/19. The goal of the project is to design and implement an analysis center for exposure studies. McGuinness leads the Data Science core of the overall 9 million dollar award to Mount Sinai. The Data Center serves the entire 50 million dollar overall Child Health Exposure Analysis Repository program.

D. McGuinness, K. Bennett, B. Yener, C. Breneman, A. Dyson. Healthy Birth, Growth, and Development Knowledge Integration. From the Gates Foundation, Seattle, Washington. 353,917. May 2015-Aug 2016. The goal of the project is to develop a holistic, multidisciplinary, integrated approach to establish and deliver effective intervention that is tailored to local life cycle and pathology. McGuinness leads the ontology for global health effort

D. McGuinness. Scalable Hypothesis Reasoning supporting the Analysis in Motion Initiative. From Battelle Memorial Institute Pacific Northwest Division. Pacific Northwest National Laboratory. Contract Number 249149. \$ 295,545. 1/1/2015-9/30/2016. The project's goal is to develop a symbolic reasoning platform that can continuously formulate and evaluate proposed hypotheses as new knowledge arrives from streams of propositions.

K. Fortun, M. Fortun, D. McGuinness. Semantic Digital Infrastructures for the Empirical Humanities: Enabling Engagement with Complex Global Challenges. RPI Knowledge and Innovation Program. \$100,000. 1/1/2015-12/31/2015.

C. Collins, A. Dyson, K. Rogers, K. Bennett, K. Fortun, M. Fortun, D. McGuinness. Parameterizing the Microbiome in Built and Natural Environments. RPI Knowledge and Innovation Program. \$139,628. 1/1/2015-5/31/2016.

D. McGuinness. DataONE (observation Network for Earth). NSF DataNet Program. McGuinness Award: 408,730.00. 10/1/14-9/30/16. University of New Mexico Prime – total award over 25 million. The project's goal is to enable new science and

knowledge creation through universal access to data about life on earth and the environment that sustains it. McGuinness co-leads the semantics and interoperability working group and is responsible for the semantic technology model.

D. McGuinness. ReDrugS: Repurposing Drugs using Semantics, RPI-Mount Sinai Seedling, \$19,500. 1/1/2014-12/31/2014. This project aimed to find new effective treatments for disease using approved drugs. Our approach was to gather and integrate existing data using semantic technologies to help discover promising drug repurposing from the causal perspective instead of simply using a correlative perspective.

J. Hendler, D. McGuinness, Cloud-Oriented Social Media Inference and Counteraction (COSMIC), DARPA's Social Media in Strategic Communication (SMISC) Program, (Subcontract to Sentimetrix Inc.), \$1.2M, 01/23/2012 – 05/10/2015. The goal of the project is leverage clouds and social media to better support inference. McGuinness was in charge of knowledge representation, modeling, and provenance.

D. McGuinness. Healthcare Analytics Using Semantic Technologies, RPI Seed, \$50,000. 2013.

D. McGuinness. A Roadmap for Using Social Media to Gather First Responder Requirements. National Institute of Standards and Technology, \$120,000. 09/01/2012 – 02/28/2014. RPI J12428. The goal of the project is to develop a methodology for using social media to gather first responder requirements. McGuinness led the model development and the semantic technology tools.

D. McGuinness, J. Hendler, Foresight and Understanding from Scientific Exposition (FUSE), IARPA, (Subcontract to BAE Systems) \$2,000,000/4yr, 8/11/2011 – 05/07/2014. The project's goal is to identify emerging topics in science and then to explain findings. McGuinness leads the semantic foundations, ontology model, and explanation work.

M. Parsons, D. McGuinness, P. Fox, R. Duerr. International Network of Arctic Knowledge (INAK) / Semantic Sea Ice Interoperability Initiative (SSII). National Science Foundation. (Subcontract to Regents of the University of Colorado). RPI award: \$ 335,000, J40262. 10/1/2010 – 12/2014. With 15,000 supplement until 9/30/2015 and 49,000 supplement pending. The project's goal was to create an interdisciplinary research group around modeling sea ice and to create interoperable data. McGuinness co-led the ontology model and semantic eScience methodology.

P. Fox, D. McGuinness. A Semantic eScience Framework: Facilitating Next Generation Data Intensive Science, \$ 1,100, 000, 9/15/2009 - 8/31/2012. The project's goal was to create a next generation tool suite for supporting eScience. McGuinness co-designed a semantic web methodology, which she now teaches

ugrad/grad classes on, which has been reused in dozens of science informatics projects.

D. McGuinness. Social Networking Tools to Enable Collaboration in the Tobacco Surveillance, Epidemiology, and Evaluation Network. NSF, Subcontract to Northwestern University. \$ 131,287. 8/1/2010 - 2/29/2012. RPI6081. The goal of the project was to design and develop an evolving platform demonstrating how health behavior, policy, and demographic data can be integrated, visualized, and communicated to empower communities and support new avenues of research and policy for cancer prevention and control. McGuinness was responsible for the semantic technology, knowledge modeling, prototype building, and demonstrations.

J. Hendler, D. McGuinness. Network Science Collaborative Technology Alliance (NS-CTA). ARL. RPI J71364.. Role: Senior Researcher. \$640,423.86. 9/28/09 – 9/27/13. The goal of the project is to advance networks science and create tools and methodologies for understanding, predicting, and influencing networks. McGuinness was in charge of semantic foundations and explaining network analysis.

D. McGuinness. Explaining Cognitive Assistants that Learn and Organize. DARPA program. Subcontract to SRI. \$ 155,097. 2/1/2008 - 3/31/2009.

J. Hendler, D. McGuinness, Knowledge Acquisition for Human Terrain, DARPA, \$150k/1yr (Seedling), subcontract to BBN Technologies, 8/1/2008 - 6/15/2009.
D. McGuinness. Cognitive Assistant that Learns and Observes (CALO). DARPA Personalized Assistant that Learns Program, subcontract to Stanford University. \$ 200,000, 9/7/2007 - 1/31/2008.

Note on Stanford projects, as I was not a professor, I was not allowed to be a PI. I put the order according to who wrote the proposal and who ran it. I wrote and ran projects and provided all of the reporting when I was the project manager and proposal author.

D. McGuinness, R. Fikes. Generalized Integrated Learning Architecture (GILA) Source of Support: DARPA Integrated Learning Program via subcontract to Lockheed Martin Advanced Technology Laboratories , PI Transferred to Thrun after McGuinness went to RPI. \$ 1,784,670, 04/1/06 to 08/31/08 . The project explored machine learning and knowledge representation for next generation integrated learning environments. McGuinness led the knowledge modeling, ontology and explanation environments.

M. Musen, D. McGuinness, et al. cBIO- National Center for Biomedical Ontology . NIH Biomedical Information Science and Technology Initiative (BISTI), Contract Number: U54 HG004028, Total Award Amount: \$3,758,967 (Total Directs \$3,208,226), 09/23/05 to 07/31/06

D. McGuinness, R. Fikes. Explainable Policies for Establishing Trust in Web Applications. NSF Cybertrust Transparent Accountable Data Mining. Subcontract to MIT. CoPIs: Berners-Lee, Weitzner. Contract No.: 5710001895 Award #0524481, My award: \$285,000, Transferred Stanford PI to Thrun after McGuinness went to RPI. 09/01/05 to 08/31/08.

R. Fikes, D. McGuinness. Interoperable Knowledge Representation for Intelligence Support (IKRIS). ARDA/DTO. Contract No.: DAAB07-03-CN206-60918. Subcontract to MITRE (PI: Maybury). \$ 416,000, 02/14/05 to 06/30/06.

D. McGuinness, R. Fikes. Explainable Knowledge Aggregation from Multiple Heterogeneous Information Sources. DARPA Seedling. Contract No.: HR0011-05-0019 , : \$1,369,567 . 03/8/05 to 02/28/07.

D. McGuinness, R. Fikes. Cognitive Information Processing Technology for the Enduring Personal Assistant., DARPA Personal Assistant that Learns (PAL) Program. Subcontract to SRI (PIs Perrault and Marks). Total Award over 28 million. My award: \$3,161,925 , later added Thrun as Stanford PI after McGuinness moved to RPI. 04/23/03 – 09/30/07 .

M. Musen, D. McGuinness, et al. A Resource for Biomedical Ontologies and Knowledge Bases. NIH., Contract Number: P41 LM007885 , \$2,247,872 , 04/01/03 to 05/31/06.

R. Fikes, D. McGuinness. Knowledge Associates for Novel Intelligence (KANI), ARDA/DTO Novel Intelligence for Massive Data Program. Contract No.: 2003*H278000*000 , \$5,550,000 (Includes sub-awards to IBM and Battelle). 12/06/02 – 06/30/00.

R. Fikes, A. Fox, S. McIlraith, D. McGuinness. Semantic Services. Stanford Networking Research Center. \$ 516,808. 10/1/02- 10/1/06

R. Fikes, D. McGuinness, H. Garcia Molina. From the Web to the Global Infobase. NSF Knowledge Discovery and Dissemination (KDD). NSF-IIS-0085896. \$212,500 , 10/01/02 - 3/31/03.

R. Fikes, D. McGuinness. Representation and Reasoning Technology for Logistics Policies. DARPA Ultralog Program (add on to DAML project funds), \$597,703 . 02/01/02 - 01/31/05.

R. Fikes, D. McGuinness. AQUAINT Question Answering (AQUA), ARDA Advanced Question Answering Program /DTO via subcontract to SAIC, Contract No: 2002-H768000-000 , \$ 570,000. 11/15/01 – 11/14/03.

D. McGuinness, R. Fikes. DARPA Integrated Learning Program award to Lockheed Martin (GILA), DoD Award (subcontract through Lockheed Martin – total award 24M), Stanford, 1,784,670, 2007-2008.

RPI, \$800,000 11/1/07-12/31/2009 with J. Hendler

D. McGuinness. CISCO Meta Data & Ontology Technology Project. \$ 300,000. 07/1/00 – 07/1/01.

D. McGuinness, R. Fikes. Tools for DAML-Based Services, Document Templates, and Query-Answering. DARPA IXO, DARPA Agent Markup Language Program. : \$3,373,833 . 06/29/00 to 11/30/06

D. McGuinness, R. Fikes. Creating, Maintaining, and Integrating Understandable Knowledge Bases. DARPA Rapid Knowledge Formation Program through Navy SPAWAR. Contract No.: N66001-00-C-8027 . \$1,626,572 , 04/19/00-04/17/04.

R. Fikes, D. McGuinness. Large Scale Repositories of High Expressive Reusable. DARPA High Performance Knowledge Base program. Contract No.: N66001-96-C-8622. \$ 2,554,793, 4/30/97 - 4/30/01

Patents

Issued

1. US Patent 5720008: McGuinness, Patel-Schneider, and Resnick. "Knowledge Base Management System with Dependency Information for Procedural Tests", Issued 2/17/98, Submitted 5/94.
2. US Patent 5974405: McGuinness, Patel-Schneider, and Resnick. "Knowledge Base Management System with Enhanced Explanation of Derived Information", Issued 10/26/99, submitted 5/94.
3. US Patent 6256627: McGuinness, Resnick, Beattie, and Manning. "System and Method for Maintaining a Knowledge Base and Evidence Set". Issued July 3, 2001. Submitted 2/98, filed 6/23/98, allowed 12/29/00.
4. US Patent 6385600: McGuinness, Beattie, and Resnick. "System And Method For Searching On A Computer Using An Evidence Set". Issued May 7, 2002, submitted 4/3/98, allowed February 7, 2002. U. S. Application Number 09/054,886.
5. US Patent McGuinness, Beattie, and Resnick. "System And Method For Maintaining A Knowledge Base And Evidence Set". submitted 2/98, Docket No. 112569 Division Filed: April 11, 2001, allowed May 20, 2002. U.S. Application Number 09/832,221.

Publications

Also see:

1. Google Scholar - <http://scholar.google.com/scholar?hl=en&q=deborah+mcguinness>
2. DBLP - http://www.informatik.uni-trier.de/~ley/pers/hd/m/McGuinness:Deborah_L=.html , and [http://dblp.org/search/#query=deborah mcguinness](http://dblp.org/search/#query=deborah+mcguinness)

3. RPI Tetherless World Constellation McGuinness publications partial listing - http://tw.rpi.edu/web/person/Deborah_L_McGuinness/Publications
4. Stanford Knowledge Systems Laboratory publications McGuinness publications partial listing: http://www.ksl.stanford.edu/abstracts_by_author/McGuinness,D.papers.html
5. ResearchGate - https://www.researchgate.net/profile/Deborah_Mcguinness
6. Academia.edu - <https://rpi.academia.edu/DeborahLMcGuinness>

Books

1. Franz Baader, Diego Calvanese, Deborah L. McGuinness, Daniele Nardi, and Peter F. Patel-Schneider, editors, *The Description Logic Handbook: Theory, Implementation and Applications*, Cambridge University Press, 2003. Second edition, 2006.
2. Isabel Cruz, Stefan Decker, Jerome Euzenat, and Deborah L. McGuinness, editors. *The Emerging Semantic Web*. IOS Press, 2002. (Available from <http://www.iospress.nl/site/html/boek-1381825766.html>.)
3. Joanne S. Luciano, Grant P. Cumming, Eva Kahana, Mark D. Wilkinson, Elizabeth H Brooks, Dominick DiFranzo, Holly Jarman, Deborah L. McGuinness, Margaret Levine, Cathy Pope. *Health Web Science*. Now Publishers Inc. Hanover, MA, USA , 2014.

Conference Proceedings

1. Deborah McGuinness, James Michaelis, and Luc Moreau. *Provenance and Annotation of Data and Process*. Springer. 2012. <http://www.springerlink.com/content/978-3-642-17818-4#section=824603&page=1>
2. Deborah McGuinness and George Ferguson, Program Co-chairs. *Proceedings of the Nineteenth National Conference on Artificial Intelligence (AAAI-04)*. AAAI Press, San Jose, California, July, 2004. Available from <http://www.aaai.org/Press/Proceedings/AAAI/2004/aaai04.html> .
3. Dieter Fensel, Fausto Guinchiglia, Deborah McGuinness, and Mary-Anne Williams, editors. *Knowledge Representation 2002: Proc. of the 8th International Conference (KR '02)*. Morgan Kaufmann Publishers, Toulouse, France, May 2002. Available from http://www.mkp.com/books_catalog/catalog.asp?ISBN=1-55860-847-8 .

Journals

1. James P. McCusker, Michel Dumontier, Rui Yan, Sylvia He, Jonathan S. Dordick, Deborah L. McGuinness. *Finding Melanoma Drugs through a Probabilistic Knowledge Graph*. *PeerJ* 4L 32007, 2016.
2. Zheng JG, Howsmon D, Zhang B, Hahn J, McGuinness D, Hendler J, Ji H. *Entity linking for biomedical literature*. *BMC Med Inform Decis Mak*. 2015;15 Suppl 1:S4. doi: 10.1186/1472-6947-15-S1-S4. Epub 2015 May 20. PMID: 26045232
3. Patton, EW, Seyed P, Wang P, Fu L, McGuinness DL, Dein FJ, Bristol RS. (2014). *SemantEco: A Semantically-powered Modular Architecture for Integrating Distributed Environmental and Ecological Data*. *Future Generation Computing Systems* 36, pp. 430–440.

4. Joanne S. Luciano, Grant P. Cumming, Eva Kahana, Mark D. Wilkinson, Elizabeth H Brooks, Dominick DiFranzo, Holly Jarman, Deborah L. McGuinness, Margaret Levine, Cathy Pope. Health Web Science. Foundations and Trends in Web Science 4(4), 269-419, 2014.
5. Duerr, Ruth E., McCusker, James, Parsons, Mark A., Singh Khalsa, Siri Jodha, Pulsifer, Peter L., Thompson, Cassidy, Yan, Rui, McGuinness, Deborah L. Fox, Peter. Formalizing the semantics of sea ice. Earth Science Informatics September 2014. Springer, Berlin Heidelberg, <http://dx.doi.org/10.1007/s12145-014-0177-z>
6. Michaelis, J., McGuinness, D.L., Chang, C., Erickson, J.S., Hunter, D., and Babko-Malaya, O. 2014. Explaining Scientific and Technical Emergence Forecasting. In Applications of Social Media and Social Network Analysis, pp 177-192 2015.
7. Tilmes, Curt, Fox, Peter, Ma, Xiaogang, McGuinness, Deborah L., Privette, Ana Pinheiro, Smith, Aaron, Waple, Anne, Zednik, Stephan, and Zheng, Jin Guang. 2013. Provenance Representation for the National Climate Assessment in the Global Change Information System. *IEEE Transactions on Geoscience and Remote Sensing*. [10.1109/TGRS.2013.2262179](http://dx.doi.org/10.1109/TGRS.2013.2262179) Vol PP(99) http://homepages.rpi.edu/~max7/pdf/2013_Tilmes_ITGRS.pdf
8. James P. McCusker, Timothy Lebo, Cynthia Chang, Deborah L. McGuinness, Paulo Pinheiro da Silva: Parallel Identities for Managing Open Government Data. *IEEE Intelligent Systems* 27(3): 55-62 (2012).
9. Qing Liu, Quan Bai, Corne Kloppers, Peter Fitch, Qifeng Bai, Kerry Taylor, Peter Fox, Stephan Zednik, Li Ding, Andrew Terhorst and Deborah McGuinness. An ontology-based knowledge management framework for a distributed water information system. *Journal of Hydroinformatics*, IWA Publishing, 2012. <http://www.iwaponline.com/jh/up/jh2012152.htm>, doi:10.2166/hydro.2012.152.
10. Paul Lukowicz, Sanjiv Nanda, Vidya Narayanan, Hal Albelson, Deborah L. McGuinness, Michael I. Jordan: Qualcomm Context-Awareness Symposium Sets Research Agenda for Context-Aware Smartphones. *IEEE Pervasive Computing* 11(1): 76-79 (2012).
11. Xiaoqin Zhang, Bhavesh Shrestha, Sung Wook Yoon, Subbarao Kambhampati, Phillip DiBona, Jinhong Guo, Daniel McFarlane, Martin O. Hofmann, Kenneth R. Whitebread, Darren Scott Appling, Elizabeth T. Whitaker, Ethan Trehwhitt, Li Ding, James Michaelis, Deborah L. McGuinness, James A. Hendler, Janardhan Rao Doppa, Charles Parker, Thomas G. Dietterich, Prasad Tadepalli, Weng-Keen Wong, Derek T. Green, Antons Rebguns, Diana F. Spears, Ugur Kuter, Geoffrey Levine, Gerald DeJong, Reid MacTavish, Santiago Ontañón, Jainarayan Radhakrishnan, Ashwin Ram, Hala Mostafa, Huzaiifa Zafar, Chongjie Zhang, Daniel D. Corkill, Victor R. Lesser, Zhexuan Song: An Ensemble Architecture for Learning Complex Problem-Solving Techniques from Demonstration. *ACM TIST* 3(4): 75 (2012)
12. Sam Blisard, Ted Carmichael, Li Ding, Tim Finin, Wende Frost, Arthur C. Graesser, Mirsad Hadzikadic, Lalana Kagal, Geert-Jan M. Kruijff, Pat Langley, James C. Lester, Deborah L. McGuinness, Jack Mostow, Panagiotis Papadakis, Fiora Pirri, Rashmi Prasad, Svetlana Stoyanchev, Pradeep Varakantham: Reports of the AAAI 2011 Fall Symposia. *AI Magazine* 33(1) (2012)

13. Li Ding, James Michaelis, James McCusker, and Deborah L. McGuinness, *Linked Provenance Data: A Semantic Web-based Approach to Interoperable Workflow Traces*, Future Generation Computer Systems, Volume 27, Issue 6, June 2011, Pages 797-805.
<http://www.sciencedirect.com/science/article/pii/S0167739X10002049>
14. Luciano, Joanne, Bosse Andersson, Colin Batchelor, Olivier Bodenreider, Tim Clark, Christine Denney, Christopher Domarew, Thomas Gambet, Lee Harland, Naja Jentsch, Vipul Kashyap, Peter Kos, Julia Kozlovsky, Timothy Lebo, Scott M Marshall, James P McCusker, Deborah L McGuinness, Chimezie Ogbuji, Elga Pichler, Robert Powers, Eric Prudhommeaux, Matthias Samwald, Lyn Schriml, Peter Tonellato, Patricia Whetzel, Jun Zhao, Susie Stephens and Michel Dumontier. "The Translational Medicine Ontology and Knowledge Base: Driving personalized medicine by bridging the gap between bench and bedside." Journal of Biomedical Semantics. 2011 2(Suppl 2):S1 doi:10.1186/2041-1480-2-S2-S1 BioMed Central Ltd, <http://www.jbiomedsem.com/content/2/S2/S1>.
15. Li Ding, Dominic DiFranzo, Alvaro Graves, Tim Lebo, John S. Erickson, Gregory Todd Williams, Xian Li, James Michaelis, Jin Guang Zheng, Johanna Flores, Zhenning Shangguan, Deborah L. McGuinness and Jim Hendler. TWC LOGD: A portal for linked open government data ecosystems. Journal of Web Semantics. Volume 9, Issue 3, September 2011, Pages 325-333.
<http://www.sciencedirect.com/science/article/pii/S1570826811000382>
16. Li Ding, James Michaelis, Jim McCusker. and Deborah L. McGuinness, *Linked Provenance Data: A Semantic Web-based Approach to Interoperable Workflow Traces*, Future Generation Computer Systems, 2010.
17. Thomas Barkowsky, Sven Bertel, Frank Broz, Vinay K. Chaudhri, Nathan Eagle, Michael R. Genesereth, Harry Halpin, Emily Hamner, Gabe Hoffmann, Christoph Hölscher, Eric Horvitz, Tom Lauwers, Deborah L. McGuinness, Marek P. Michalowski, Emily Mower, Thomas F. Shipley, Kristen Stubbs, Roland Vogl, Mary-Anne Williams: Reports of the AAAI 2010 Spring Symposia. AI Magazine 31(3): 115-122 (2010).
18. Peter Fox, Deborah L. McGuinness, Luca Cinquini, Patrick West, Jose Garcia, James L. Benedict, and Don Middleton. Ontology-supported Scientific Data Frameworks: The Virtual Solar-Terrestrial Observatory Experience. Computers and Geosciences Journal, Volume 35, issue 4, (April 2009), pages 724-738.
<http://portal.acm.org/citation.cfm?id=1519763>
19. Boyan Brodaric, Peter Fox, Deborah L. McGuinness: Geoscience knowledge representation in cyberinfrastructure. Computers & Geosciences 35(4): 697-699 (2009).
20. Deborah L. McGuinness, Peter Fox, Boyan Brodaric, Elisa F. Kendall: The Emerging Field of Semantic Scientific Knowledge Integration. IEEE Intelligent Systems 24(1): 25-26 (2009)
21. Ricardo A. Baeza-Yates, Alberto H. F. Laender, Deborah L. McGuinness: Information systems special issue on ACM CIKM 2007. Inf. Syst. 34(8): 671-672 (2009)

22. Alyssa Glass, Deborah L. McGuinness, Paulo Pinheiro da Silva, and Michael Wolverton. Trustable Task Processing Systems. In Roth-Berghofer, T., and Richter, M.M., editors, KI Journal, Special Issue on Explanation, Kunstliche Intelligenz, 2008.
23. Marcello Balduccini, Chitta Baral, Boyan Brodaric, Simon Colton, Peter Fox, David Gutelius, Knut Hinkelmann, Ian Horswill, Bernardo A. Huberman, Eva Hudlicka, Kristina Lerman, Christine L. Lisetti, Deborah L. McGuinness, Mary Lou Maher, Mark A. Musen, Mehran Sahami, Derek H. Sleeman, Barbara Thönssen, Juan D. Velásquez, Dan Ventura: AAAI 2008 Spring Symposia Reports. AI Magazine 29(3): 107-115 (2008).
24. David Martin, Mark Burstein, Drew McDermott, Deborah L. McGuinness, Sheila McIlraith, Massimo Paolucci, Evren Sirin, Naveen Srinivasan, and Katia Sycara. Bringing Semantics to Web Services with OWL-S. World Wide Web Journal, Volume 10, Number 3, pp 243-277 (2007)
<http://springerlink.com/content/wp8q2133g5725340/>. Also, Stanford KSL Technical Report KSL-06-21.
25. Karen L. Myers, Pauline Berry, Jim Blythe, Ken Conley, Melinda T. Gervasio, Deborah L. McGuinness, David N. Morley, Avi Pfeffer, Martha E. Pollack, Milind Tambe: An Intelligent Personal Assistant for Task and Time Management. AI Magazine 28(2): 47-61 (2007).
26. Alexander P. Morgan, John A. Cafeo, Kurt Godden, Ronald M. Lesperance, Andrea M. Simon, Deborah L. McGuinness, James L. Benedict: The General Motors Variation-Reduction Adviser: A Deployed System for Experience Management. KI 21(4): 27-29 (2007).
27. Peter Fox, Linda Gunderson, Kerstin Lehnert, Deborah L. McGuinness, Krishna Sinha, Walt Snyder. Toward Broad Community Collaboration in Geoinformatics. EOS, Vol. 87, No. 46, November 14, 2006.
<http://www.agu.org/journals/eo/eo0646/2006EO460005.pdf>
28. Paulo Pinheiro da Silva, Deborah L. McGuinness and Richard Fikes. A Proof Markup Language for Semantic Web Services. Information Systems. Volume 31, Issues 4-5, June-July 2006, Pages 381-395. Previous version, technical report, Knowledge Systems Laboratory, Stanford University.
29. Muthuraman Sathiamurthy, Bjoern Peters, Huynh-Hoa Bui, John Sidney, John Mokili, Stephen S Wilson, Ward Fleri, Deborah L McGuinness, Philip E Bourne and Alessandro Sette. An ontology for immune epitopes: application to the design of a broad scope database of immune reactivities. Immunome Research 2005, 1:2 (20 Sep 2005). <http://www.immunome-research.com/content/1/1/2>.
30. Diego Mollá Aliod, Eduardo Alonso, Srinivas Bangalore, Joseph E. Beck, Bir Bhanu, Jim Blythe, Mark S. Boddy, Amedeo Cesta, Marko Grobelnik, Dilek Z. Hakkani-Tür, Sanda M. Harabagiu, Alain Léger, Deborah L. McGuinness, Stacy Marsella, Natasa Milic-Frayling, Dunja Mladenic, Daniel Oblinger, Paul E. Rybski, Pavel Shvaiko, Stephen F. Smith, Biplav Srivastava, Sheila Tejada, Hannes Högni Vilhjálmsson, Kristinn R. Thórisson, Gökhan Tür, José Luis Vicedo González, Holger Wache: The Workshops at the Twentieth National Conference on Artificial Intelligence. AI Magazine 26(4): 102-108 (2005).
31. Deborah L. McGuinness and Paulo Pinheiro da Silva. Explaining Answers from the Semantic Web: The Inference Web Approach. Web Semantics: Science, Services and

- Agents on the World Wide Web Special issue: International Semantic Web Conference 2003 - Edited by K.Sycara and J.Mylopoulis. Volume 1, Issue 4. Journal published Fall, 2004. <http://www.websemanticsjournal.org/ps/pub/2004-22>
32. David S. Frankel, Patrick Hayes, Elisa F. Kendall, and Deborah L. McGuinness. A Model-Driven Semantic Web: Reinforcing Complimentary Strengths. MDA Journal, Business Process Trends, July 2004.
 33. Deborah L. McGuinness. Question Answering on the Semantic Web. In IEEE Intelligent Systems, Volume 19, No. 1, January/February, 2004.
 34. Paulo Pinheiro da Silva, Deborah L. McGuinness, Rob McCool, Knowledge Provenance Infrastructure. IEEE Data Engineering Bulletin Vol.26 No.4, pages 26-32, December 2003.
 35. Deborah L. McGuinness and Paulo Pinheiro da Silva. Infrastructure for Web Explanations. Selected from International Semantic Web Conference (ISWC2003) PublicationS, Sanibel Is ., FL, USA. In Springer Lecture Notes in Computer Science, ISSN: 0302-9743, Volume 2870, 2003. pp. 113-129.
 36. Deborah L. McGuinness, Richard Fikes, James Hendler and Lynn Andrea Stein. ``DAML+OIL: An Ontology Language for the Semantic Web ". In IEEE Intelligent Systems, Vol. 17, No. 5, pages 72-80, September/October 2002.
 37. Ora Lassila and Deborah L. McGuinness. ``The Role of Frame-Based Representation on the Semantic Web". In ETAI (Electronic Transactions in Artificial Intelligence) Volume 6, 2001. Also. KSL Tech Report Number KSL-01-02.
 38. Dieter Fensel, Ian Horrocks, Frank van Harmelen, Deborah L. McGuinness, and Peter F. Patel-Schneider. ``OIL: An Ontology Infrastructure for the Semantic Web ". In IEEE Intelligent Systems, Vol. 16, No. 2, March/April 2001.
 39. Deborah L. McGuinness ``Ontologies and Online Commerce". In IEEE Intelligent Systems, Vol. 16, No. 1, January/February 2001, pages 8-14.
 40. Dieter Fensel, Deborah L. McGuinness, Ellen Schulten, Wee Keong Ng, Ee-Peng Lim, Guanghao Yan: Ontologies and Electronic Commerce. IEEE Intelligent Systems 16(1): 8-14 (2001).
 41. James Hendler and Deborah L. McGuinness. ``The DARPA Agent Markup Language". In IEEE Intelligent Systems, Vol. 15, No. 6, November/December 2000, pages 67-73.
 42. Ronald J. Brachman, Alex Borgida, Deborah L. McGuinness, and Peter F. Patel-Schneider. "Reducing" CLASSIC to Practice: Knowledge Representation Theory Meets Reality. In Artificial Intelligence 114(1-2) pages 203-237, October, 1999.
 43. Franz Baader, Alex Borgida, Ralph Kuesters and Deborah L. McGuinness. Matching in Description Logics. In Journal of Logic and Computation -- Special Issue on Description Logics. Volume 9, number 3, June 1999.
 44. Enrico Franconi, G. de Giacomo, Ian Horrocks, Deborah L. McGuinness, Werner Nutt, Peter F. Patel-Schneider, and Chris Welty. Report on the 1998 International Workshop on Description Logics DL'98. In Journal of Logic and Computation -- Special Issue on Description Logics. Volume 9, number 3, June 1999.
 45. Deborah L. McGuinness and Jon Wright. ``An Industrial Strength Description Logic-based Configurator Platform". IEEE Intelligent Systems, Vol. 13, No. 4, July/August 1998, pp. 69-77.

46. Deborah L. McGuinness and Jon Wright. "Conceptual Modeling for Configuration: A Description Logic-based Approach." In the Artificial Intelligence for Engineering Design, Analysis, and Manufacturing Journal (AIEDAM) - special issue on Configuration, AI EDAM 12(4): 333-344 (1998)
47. Tim Darr, Mark Fox, and Deborah L. McGuinness, editors. Special Configuration Issue of the Artificial Intelligence for Engineering Design, Analysis, and Manufacturing (AIEDAM) Journal, AI EDAM 12(4): 293-294 (1998)
48. Deborah L. McGuinness, Peter F. Patel-Schneider, Lori Alperin Resnick, Charles Isbell, Matt Parker, and Chris Welty. A Description Logic Based Configurator for the Web. SIGART Bulletin, 9(2) pp 20-22. Fall, 1998.
49. Ronald J. Brachman, Peter G. Selfridge, Loren G. Terveen, Boris Altman, Alex Borgida, Fern Halper, Thomas Kirk, Alan Lazar, Deborah L. McGuinness, Lori Alperin Resnick. "Integrated Support for Data Archaeology." In International Journal of Intelligent and Cooperative Information Systems, 2:2 1993, pages 159--185.
50. Peter F. Patel-Schneider, Deborah L. McGuinness, Ronald J. Brachman, Lori Alperin Resnick, and Alex Borgida. "The CLASSIC Knowledge Representation System: Guiding Principles and Implementation Rationale". SIGART Bulletin, 2:3 (1991), pages 108--113.
51. Peter F. Patel-Schneider, Bernd Owsnicki-Klewe, Alfred Kobsa, Nicola Guarino, Robert M. MacGregor, William S. Mark, Deborah L. McGuinness, Bernhard Nebel, Albrecht Schmiedel, John Yen: Term Subsumption Languages in Knowledge Representation. AI Magazine 11(2): 16-23 (1990).
52. Deborah L. McGuinness: Remarks on the 11th International Conference on Research and Development in Information Retrieval. SIGIR Forum 22(3-4): 52-59 (1988).

REFEREED CONFERENCE PUBLICATIONS and BOOK ARTICLES

1. Patricia Kovatch, Deborah L. McGuinness, Chris Gennings, Susan L. Teitelbaum. Lessons Learned from the Children's Health Exposure Analysis Resource (CHEAR) Data Center. In International Society for Environmental Epidemiology, Rome, Italy, September 2016.
2. Erickson, J.S., Sheehan, J., Bennett, K.P., McGuinness, D.L. 2016. Addressing Scientific Rigor in Data Analytics Using Semantic Workflows. International Provenance and Annotation Workshop. Pp 187-190. June, 2016.
3. McGuinness, D.L. and Bennett, K. 2015. Integrating Semantics and Numerics: Case Study on Enhancing Genomic and Disease Data Using Linked Data Technologies. In Proceedings of SmartData 2015 (August 18-20 2015, San Jose, CA).
4. Kusum S. Mathews, Judith E. Nelson, Deborah L. McGuinness, and Lynne D. Richardson. Perceptions of Triage and Care for Critically Ill Patients in the ED: A national survey of emergency physicians. Society for Academic Emergency Medicine (SAEM) 2015. New Orleans, LA. May 2015.
5. Kusum S. Mathews, J. Michael Guthrie, Deborah L. McGuinness, Nicholas G. Genes, and Lynne D. Richardson. ICU Admission Decisions for ED Patients: A Mixed Methods Approach. Society for Academic Emergency Medicine (SAEM) 2015. New Orleans, LA. May 2015.

6. Mathews KS, Liu Y, Ji H, McGuinness DL. Deconstructing Intensive Care Unit Triage: Identifying Factors Influencing Admission Decisions Using Natural Language Processing and Semantic Technology. American Thoracic Society Annual Conference Abstracts 2015. <http://nlp.cs.rpi.edu/paper/ats.pptx>
7. Patton, E.W. & McGuinness, D.L. A Power Consumption Benchmark for Reasoners on Mobile Devices. Proceedings of the 13th International Semantic Web Conference (October 19-23, 2014, Trento, Italy). pp 409-424.
8. Evan W. Patton, Deborah L. McGuinness: A Prototype Web Service for Benchmarking Power Consumption of Mobile Semantic Applications. Proceedings of the 13th International Semantic Web Conference (October 19-23, 2014, Trento, Italy). pp. 41-44.
9. John S. Erickson, Katherine Chastain, Zachary Fry, Jim McCusker, Rui Yan, Evan W. Patton, Deborah L. McGuinness: Identifying First Responder Communities Using Social Network Analysis. Proceedings of the 13th International Semantic Web Conference (October 19-23, 2014, Trento, Italy). International Semantic Web Conference, 2014: pp. 425-428.
10. McCusker, J., Yan, R., Solanki, K., Erickson, J.S., Chang, C., Dumontier, M., Dordick, J., and McGuinness, D.L. 2014. A Nanopublication Framework for Biological Networks using Cytoscape.js. In Proceedings of International Conference on Biomedical Ontologies (ICBO 2014) (October 6-9 2014, Houston, TX). <http://tw.rpi.edu/web/doc/redrugsnanopub>
11. Patrice Seyed, Zach Fry, Deborah L. McGuinness. Improving Ontology Service-Driven Entity Disambiguation. In Formal Ontologies in Information Systems Conference, Formal Ontologies Meet Industry Workshop, Sept 22, 2014, pp 29-38.
12. Sajjad Hussain, Hong Sun, Ali Anil Sinaci, Gokce Banu Laleci Erturkmen, Charles N. Mead, Alasdair J. G. Gray, Deborah L. McGuinness, Eric Prud'hommeaux, Christel Daniel, Kerstin Forsberg: A Framework for Evaluating and Utilizing Medical Terminology Mappings. Proc. Of the 25th European Medical Informatics Conference, (MIE 2014), Istanbul, Turkey, Aug 31-Sept3, 2014, pp. 594-598
13. DiFranzo, D., Erickson, J.S., Gloria, K., Luciano, J.S., McGuinness, D.L., and Hendler, J. 2014. The Web Observatory Extension: Facilitating Web Science Collaboration through Semantic Markup. In Proceedings of WWW 2014 (April 7-11 2014, Seoul, South Korea), pages 475-480.
14. DiFranzo, D., Erickson, J.S., Gloria, K., McGuinness, D.L., and Luciano, J.S. 2014. Building Web Observatories for Health Web Science. In Proceedings of Web Science Conference, BWOW track, 2014 (June 23-26 2014), Indiana University, Bloomington, IN, US.
15. Gloria, K., Erickson, J.S., Luciano, J.S., DiFranzo, D., and McGuinness, D.L. 2014. Legal and ethical considerations: step 1b in building a health web observatory. In Proceedings of WWW 2014 (April 7-11 2014, Seoul, South Korea), pages 1061-1066.
16. McCusker, J., Solanki, K., Chang, C., Dumontier, M., Dordick, J., and McGuinness, D.L. 2014. A Nanopublication Framework for Systems Biology and Drug Repurposing. In Proceedings of the Conference on Semantics for Healthcare and Life Sciences (CSHALS) 2014 (February 26-28 2014, Boston, MA).

17. A. Patrice Seyed, Katherine Chastain, Brendan Ashby, Yue Liu, Timothy Lebo, Evan W. Patton, Deborah L. McGuinness: SemantEco Annotator. International Semantic Web Conference, October, 2013: pp. 161-164.
18. Timothy Lebo, Alvaro Graves, Deborah L. McGuinness: Content-Preserving Graphics. Consuming Linked Data (COLD) October, 2013.
19. Michaelis, J., McGuinness, D.L., Chang, C., Hunter, D., and Babko-Malaya, O. 2013. Towards Explanation of Scientific and Technological Emergence. In Proceedings of 2013 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM) (August 25-28 2013, Niagara Falls, Canada).
20. McCusker, James. P, Lebo, Tim, Krauthammer, Michael, and McGuinness, Deborah L. Next Generation Cancer Data Discovery, Access, and Integration Using Prizms and Nanopublications. Data Integration in the Life Sciences, (DILS) 2013, 105-112.
21. Shangguan, Zhenning, and Deborah L. McGuinness: Deciphering Location Context - A Semantic Web Approach. European Semantic Web Conference, (ESWC) May 26-29, 2013. Springer, Pp, 308-309.
22. A. Patrice Seyed, Timothy Lebo, Evan W. Patton, Jim McCusker, Deborah L. McGuinness: SemantEco: a next-generation web observatory. 22nd International World Wide Web Conference (WWW). May 13-17, 2013: 1369-1372.
23. Marie Joan Kristine Gloria, Deborah L. McGuinness, Joanne S. Luciano, Qingpeng Zhang: Exploration in web science: instruments for web observatories. 22nd International World Wide Web Conference, WWW May 13-17, 2013: 1325-1328
24. McCusker, J., McGuinness, D.L., Lee, J., Thomas, C., Courtney, P., Tatalovich, Z., Contractor, N., Morgan, G.D., and Shaikh, A.R. 2013. Towards Next Generation Health Data Exploration: A Data Cube-based Investigation into Population Statistics for Tobacco. In Proceedings of Hawaii International Conference on System Sciences, January 7-10 2013.
25. Wang, P., Fu, L., Patton, E.W., McGuinness, D.L., Dein, J., and Bristol, S. 2012. Towards Semantically-enabled Exploration and Analysis of Environmental Ecosystems. In Proceedings of 8th IEEE International Conference on eScience (October 8-12 2012). Pp. 1-8. *This was invited as one of the highest rated papers of the conference to submit to a special issue of an IEEE journal, and the expanded version was subsequently accepted for journal publication.
26. T. Critchlow, G. Abdulla, J. Becla, K. Kleese-Van Dam, S. Lang, and D. L. McGuinness, "Data Management Architectures", Chapter 4 in Data-Intensive Computing: Architectures, Algorithms, and Applications, I. Gorton and D. K. Gracio eds., pp 48-84, Cambridge University Press, Oct. 2012
27. Zednik, S., Fox, P., and McGuinness, D.L. 2012. A Mark-up Language for Solar Terrestrial Observations and Measurements. In Proceedings of AGU Fall Meeting 2012 (December 3-7 2012, San Francisco, CA).
28. Michaelis, J., McGuinness, D.L., Zednik, S., West, P., and Fox, P. 2012. Applying Semantics in Dataset Summarization for Solar Data Ingest Pipelines. In Proceedings of AGU Fall Meeting 2012 (December 3-7 2012, San Francisco, CA).
29. Lee, J., McCusker, J., and McGuinness, D.L. 2012. Climate Change, Disaster, and Sentiment Analysis over Social Media Mining. In Proceedings of AGU Fall Meeting 2012 (December 3-7 2012, San Francisco, CA).

30. McGuinness, D.L. Community Science – The Next Frontier. In Proc. AGU Fall Meeting 2012(Dec 3-7, San Francisco, CA).
31. McGuinness, D.L. Next Generation Data Environments. In Proc. AGU Fall Meeting 2012 (Dec. 3-7, San Francisco, CA).
32. Wang, H., Wilson, Nathan., and McGuinness, D.L. 2012. Semantic Web Compatible Names and Descriptions for Organisms. In Proceedings of AGU Fall Meeting 2012 (December 3-7 2012, San Francisco, CA).
33. Wang, H., Wilson, N., Dunn, K., and McGuinness, D.L. 2012. Semantic Vernacular System: an Observation-based, Community-powered, and Semantics-enabled Naming System for Organisms. In Proceedings of the International Semantic Web Conference ISWC 2012 (November 11-15 2012).
34. James Michaelis, Deborah L. McGuinness, Cynthia Chang, Joanne S. Luciano, James A. Hendler: Applying Multidimensional Navigation and Explanation in Semantic Dataset Summarization. International Semantic Web Conference, 2012
35. Ashwin Swaminathan, Vidya Narayanan , Deborah L. McGuinness. Towards Situation Aware Smartphones. In SemTech 2012, San Francisco, CA, June 2012.
36. Deborah L. McGuinness, Timothy Lebo, Li Ding, James P. McCusker, Abdul R. Shaikh, Richard P. Moser, Glen D. Morgan, Zaria Tatalovich, Gordon Willis, Bradford W. Hesse, Noshir S. Contractor, Paul Courtney: Towards Semantically Enabled Next Generation Community Health Information Portals: The PopSciGrid Pilot. HICSS 2012: pp. 2752-2760.
37. McGuinness, D.L., Shaikh, A.R., Lebo, T., Ding, L., Courtney, P., McCusker, J., Moser, R., Morgan, G.D., Tatalovich, Z., Willis, G., Contractor, N., and Hesse, B.W. 2012. Towards Semantically-Enabled Next Generation Community Health Information Portals: The PopSciGrid Pilot. In Proceedings of Hawaii International Conference on System Sciences 2012 (January 4-7 2012, Grand Wailea, Maui).
38. Wang, P., Zheng, J., Fu, L., Patton, E.W., Lebo, T., Ding, L., Luciano, J.S., and McGuinness, D.L. 2011. Next Generation Environmental Informatics as exemplified by the Tetherless World Semantic Water Quality Portal. In Proceedings of AGU Fall Meeting 2011 (December 5-9 2011).
39. Wang, P., Zheng, J., Fu, L., Patton, E.W., Lebo, T., Ding, L., Liu, Q., Luciano, J.S., and McGuinness, D.L. 2011. A Semantic Portal for Next Generation Monitoring Systems. In Proceedings of 10th International Semantic Web Conference (October 23-27 2011, Bonn, Germany).
40. Patton, E.W., Wang, P., Zheng, J., Fu, L., Lebo, T., Ding, L., Liu, Q., Luciano, J.S., and McGuinness, D.L. 2011. Assessing Health Effects of Water Pollution Using a Semantic Water Quality Portal. In Proceedings of 10th International Semantic Web Conference (October 23-27 2011, Bonn, Germany).
41. Zheng, J., Wang, P., Patton, E.W., Lebo, T., Luciano, J.S., and McGuinness, D.L. 2011. A Semantically-Enabled Provenance-Aware Water Quality Portal. In Proceedings of the Environmental Information Management Conference 2011 (September 28-29 2011, Santa Barbara, CA, USA).
42. McGuinness, D.L., Shaikh, A.R., Moser, R., Hesse, B.W., Morgan, G.D., Augustson, E.M., Hunt, Y., Tatalovich, Z., Willis, G., Blake, K., Courtney, P., Finney, L., Sanders, A., Ding, L., Lebo, T., McCusker, J., Contractor, N., Huang, Y., and Devlin, H. 2011. A Semantically-enabled Community Health Portal for Cancer Prevention

- and Control. In Proceedings of Web Science Conference 2011 (June 15-17 2011, Koblenz, Germany).
43. Li Ding and Joshua Shinavier and Zhenning Shangguan and Deborah L. McGuinness, SameAs Networks and Beyond: Analyzing Deployment Status and Implications of owl:sameAs in Linked Data, in Proceedings of 9th International Semantic Web Conference (ISWC'10), November 2010.
 44. Ding, L., DiFranzo, D., Graves, A., Michaelis, J., Li, X., McGuinness, D., & Hendler, J. (2010). TWC data-gov corpus: incrementally generating linked government data from data.gov. In: 19th International World Wide Web Conference.
 45. Bao, J., Tao, J., McGuinness, D., & Smart, P. (2010). Context Representation for the Semantic Web. In: Web Science Conference 2010.
 46. Ding, L., Shinavier, J., Finin, T., & McGuinness, D. (2010). An Empirical Study of owl:sameAs Use in Linked Data. In: Web Science Conference 2010.
 47. Li Ding and James Michaelis and Deborah L. McGuinness and Jim Hendler. Making Sense of Open Government Data. Proceedings of Web Science Conference (WebSci10), 2010.
 48. Paul Courtney, Abdul R. Shaikh, Noshir Contractor, Deborah L. McGuinness, Li Ding, Erik M. Augustson, Kelly Blake, Glen D. Morgan, Richard Moser, Gordon Willis, and Bradford W. Hesse, Consumer Health Portal: An Informatics Tool for Translation and Visualization of Complex, Evidence-Based Population Health Data for Cancer Prevention and Control, Proceedings of the 138th APHA Annual Meeting, 2010.
 49. Waterman, K., McGuinness, D., & Ding, L. (2010). Selective Privacy in a Web-based World: Challenges of Representing and Inferring Context. In: Intelligent Information Privacy Management.
 50. Xiaoqin (Shelley) Zhang, Sungwook Yoon, Phillip DiBona, Darren Scott Appling, Li Ding, Janardhan Rao Doppa, Derek Greeny, Jinhong K. Guo, Ugur Kuter, Geoff Levine, Reid L. MacTavish, Daniel McFarlane, James Michaelis, Hala Mostafa, Santiago Ontanon, Charles Parker, Jainarayan Radhakrishnan, Anton Rebgunsy, Bhavesh Shrestha, Zhexuan Song, Ethan B. Trehitt, Huzaifa Zafar, Chongjie Zhang, Daniel Corkill, Gerald DeJong, Thomas G. Dietterich, Subbarao Kambhampati, Victor Lesser, Deborah L. McGuinness, Ashwin Ram, Diana Spearsy, Prasad Tadepalli, Elizabeth T. Whitaker, Weng-Keen Wong, James A. Hendler, Martin O. Hofmann, Kenneth Whitebread. An Ensemble Learning and Problem Solving Architecture for Airspace Management , Innovative Applications of Artificial Intelligence (IAAI) 2009, Pasadena, CA.
 51. Jiao Tao, Li Ding, Deborah L. McGuinness: Instance Data Evaluation for Semantic Web-Based Knowledge Management Systems. HICSS 2009: 1-10.
 52. Li Ding, K. Krasnow Waterman, Jie Bao, Lalana Kagal, Deborah L. McGuinness. Towards a Semantic Web Testbed for Collaborative Policy Development , Proceedings of first Web Science Conference, 2009
 53. Ronald J. Brachman, Alexander Borgida, Deborah L. McGuinness, Peter F. Patel-Schneider: "Reducing" CLASSIC to Practice: Knowledge Representation Theory Meets Reality. Conceptual Modeling: Foundations and Applications 2009: 436-465.

54. Evan Patton, Deborah L. McGuinness. Tetherless World Mobile Wine Agent: An Application for Semantics on Mobile Devices, In Poster and Demo session of the 8th International Semantic Web Conference, October,2009 .
55. Li Ding, Jiao Tao, Deborah L. McGuinness. An initial investigation on evaluating semantic web instance data, WWW pp.1179-1180, 2008.
56. Paulo Pinheiro da Silva, Deborah L. McGuinness, Nicholas Del Rio, Li Ding. Inference Web in Action: Lightweight Use of the Proof Markup Language, International Semantic Web Conference pp.847-860, 2008
57. Peter Fox, Deborah L. McGuinness, Paulo Pinheiro da Silva. Knowledge Provenance in Virtual Observatories: Application to Image Data Pipelines, International Semantic Web Conference (Posters & Demos), 2008.
58. Deborah L. McGuinness, Peter Fox, A. Krishna Sinha, Robert Raskin, Abdelmounaam Rezgui, Patrick West. Semantic Data Integration and Registration: Application to Heterogeneous Atmosphere and Volcanic Data Sources, International Semantic Web Conference (Posters & Demos), 2008
59. James Michaelis, Li Ding, Deborah L. McGuinness. The TW Wine Agent: A Social Semantic Web Demo, International Semantic Web Conference (Posters & Demos), 2008
60. Alyssa Glass, Deborah L. McGuinness, Michael Wolverton. Toward establishing trust in adaptive agents, Intelligent User Interfaces pp.227-236, 2008
61. Tejaswini Narayanan, Deborah L. McGuinness. Towards Leveraging Inference Web to Support Intuitive Explanations in Recommender Systems for Automated Career Counseling, ACHI pp.164-169, 2008
62. Jie Bao, Li Ding, Deborah L. McGuinness, James A. Hendler. Towards Social Webtops Using Semantic Wiki, , 2008
63. Carlos G. Fern, Es, Vasco Furtado, Alyssa Glass, Deborah L. McGuinness. Towards the generation of explanations for semantic web services in OWL-S, SAC pp.2350-2351, 2008
64. Deborah McGuinness, Peter Fox, Luca Cinquini, Patrick West, Jose Garcia, James L. Benedict, and Don Middleton. The Virtual Solar-Terrestrial Observatory: A Deployed Semantic Web Application Case Study for Scientific Research. In the proceedings of the Nineteenth Conference on Innovative Applications of Artificial Intelligence (IAAI-07). Vancouver, British Columbia, Canada, July 22-26, 2007.
65. Deborah McGuinness, Alyssa Glass, Michael Wolverton and Paulo Pinheiro da Silva. Explaining Task Processing in Cognitive Assistants That Learn. In the Twentieth International FLAIRS Conference. Key, West, Florida, May 7-9, 2007. Enhanced version of Stanford KSL Tech Report KSL-06-06.
http://www.ksl.stanford.edu/KSL_Abstracts/KSL-06-06.html
66. Vasco Furtado, Paulo Pinheiro da Silva, Deborah McGuinness, Pryendra Deshwal, Dhyanesh Narayanan, Juliana Carvalho, Vladia Pinheiro and Cynthia Chang. Abstracting Web Agent Proofs into Human-Level Justifications. In the Twentieth International FLAIRS Conference. Key, West, Florida, May 7-9, 2007.
67. Honglei Zeng, M. Alhossaini, Richard Fikes, Deborah L. McGuinness. Mining Revision History to Assess Trustworthiness of Article Fragments. The Second International Conference on Collaborative Computing: Networking, Applications and

- Worksharing (Collaboratecom'06), Atlanta, Georgia, USA, November 17th-20th, 2006. http://www.ksl.stanford.edu/KSL_Abstracts/KSL-06-16.html
68. Peter Fox, Deborah L. McGuinness, Don Middleton, Luca Cinquini, J. Anthony Darnell, Jose Garcia, Patrick West, James Benedict, and Stan Solomon. Semantically-Enabled Large-Scale Science Data Repositories. In the Proceedings of the Fifth International Semantic Web Conference, Athens, Ga, November 5-9, 2006. http://www.ksl.stanford.edu/KSL_Abstracts/KSL-06-19.html
 69. J. William Murdock, Deborah L. McGuinness, Paulo Pinheiro da Silva, Chris Welty, and David Ferrucci. Explaining Conclusions from Diverse Knowledge Sources. In the Proceedings of the Fifth International Semantic Web Conference, Athens, Ga, November 5-9, 2006. http://www.ksl.stanford.edu/KSL_Abstracts/KSL-06-17.html
 70. Deborah L. McGuinness, Peter Fox, Luca Cinquini, J. Anthony Darnell, Patrick West, James L. Benedict, Jose Garcia, and Don Middleton. Ontology-Enabled Virtual Observatories: Semantic Integration in Practice. In the Proceedings of the Fifth International Semantic Web Conference, Athens, Ga, November 5-9, 2006. Poster paper accompanies full conference paper. http://www.ksl.stanford.edu/KSL_Abstracts/KSL-06-20.html
 71. Honglei Zeng, M. Alhossaini, Li Ding, Richard Fikes, Deborah L. McGuinness. Computing Trust from Revision History. Proceedings of the 2006 International Conference on Privacy, Security and Trust (PST 2006) Markham, Ontario, Canada October 30 -- November 1, 2006. http://www.ksl.stanford.edu/KSL_Abstracts/KSL-06-12.html
 72. Vladia Pinheiro, Vasco Furtado, Paulo Pinheiro da Silva, and Deborah L. McGuinness. WebExplain: A UPML Extension to Support the Development of Explanations in the Web for Knowledge-Based Systems. Proceedings of the Eighteenth International Conference on Software Engineering and Knowledge Engineering. San Francisco, CA, July 5-7, 2006. SEKE2006.
 73. Li Ding, Tim Finin, Y. Peng, Paulo Pinheiro da Silva, and Deborah L. McGuinness. Tracking RDF Graph Provenance using RDF Molecules. Proceedings of the Fourth International Semantic Web Conference, Galway, Ireland, November, 2005.
 74. Deborah L. McGuinness. Why Should You Trust Answers from the Web? In Proceedings of the Joint Conference on Information Sciences, Web Intelligence and Security Track, Salt Lake City, Utah, July 2005.
 75. Alexander P. Morgan, John A. Cafeo, Kurt Godden, Ronald M. Lesperance, Andrea M. Simon, Deborah L. McGuinness, and James L. Benedict. The General Motors Variation-Reduction Adviser. *AI Magazine* 26:2 (2005).
 76. Pavel Shvaiko, Fausto Giunchiglia, Paulo Pinheiro da Silva and Deborah L. McGuinness. Web Explanations for Semantic Heterogeneity Discovery. In Proceedings of the 2nd European Semantic Web Conference (ESWC 2005), Heraklion, Greece, May 29 to June 1, 2005 Springer, 2005.
 77. Ilya Zaihrayeu, Paulo Pinheiro da Silva and Deborah L. McGuinness. IWTrust: Improving User Trust in Answers from the Web. Proceedings of 3rd International Conference on Trust Management (iTrust2005), Springer, Rocquencourt, France, 2005.

78. Deborah L. McGuinness, Peter Fox, and Don Middleton. Virtual Solar Terrestrial Observatories. In Proceedings of the National Meeting on Research Frontiers in Cyberinfrastructure for the Geosciences. San Diego, Ca., May 5-6, 2005.
79. Christopher Welty, J. William Murdock, Paulo Pinheiro da Silva, Deborah L. McGuinness, David Ferrucci, Richard Fikes. Tracking Information Extraction from Intelligence Documents. In Proceedings of the 2005 International Conference on Intelligence Analysis (IA 2005), McLean, VA, USA, 2-6 May, 2005.
80. Alexander P. Morgan, John A. Cafeo, Kurt Godden, Ronald M. Lesperance, Andrea M. Simon, Deborah L. McGuinness, and James L. Benedict. The General Motors Variation-Reduction Adviser: Deployment Issues for an AI Application. In the Proceedings of the Innovative Applications of Artificial Intelligence, San Jose, CA., July 2004.
81. Deborah L. McGuinness and Paulo Pinheiro da Silva. Trusting Answers on the Web. In Mark T. Maybury, editor, New Directions in Question Answering. AAAI/MIT Press.
82. Deborah L. McGuinness and Paulo Pinheiro da Silva. Infrastructure for Web Explanations. In Proceedings of 2nd International Semantic Web Conference (ISWC2003), Sanibel Is., FL, USA. Springer, October 2003. Republished in Springer Lecture Notes in Computer Science, ISSN: 0302-9743, Volume 2870/2003, pp. 113-129.
83. Deborah L. McGuinness. Ontologies for Information Fusion. In Proceedings of the Sixth International Conference on Information Fusion. Cairns, Australia, July 8-11, 2003.
84. Deborah L. McGuinness. "Description Logic for Configuration". In Franz Baader, Deborah McGuinness, Daniele Nardi, and Peter Patel-Schneider, editors The Description Logic Handbook: Theory, Implementation, and Applications. Cambridge University Press, 2003.
85. Deborah L. McGuinness and Peter Patel-Schneider "From Description Logic Provers to Knowledge Representation Systems". In Franz Baader, Deborah McGuinness, Daniele Nardi, and Peter Patel-Schneider, editors The Description Logic Handbook: Theory, Implementation, and Applications. Cambridge University Press, 2003.
86. Ian Horrocks, Deborah L. McGuinness, and Chris Welty "Digital Libraries and Web-Based Information Systems". In Franz Baader, Deborah McGuinness, Daniele Nardi, and Peter Patel-Schneider, editors The Description Logic Handbook: Theory, Implementation, and Applications. Cambridge University Press, 2003.
87. Deborah L. McGuinness. "Ontologies Come of Age ". In Dieter Fensel, Jim Hendler, Henry Lieberman, and Wolfgang Wahlster, editors. Spinning the Semantic Web: Bringing the World Wide Web to Its Full Potential. MIT Press, 2003.
88. Elisa F. Kendall, Mark E. Dutra, and Deborah L. McGuinness. "Towards A Commercial Ontology Development Environment" In International Semantic Web Conference Late Breaking Topics, Sardinia, Italy, June 9-12, 2002.
89. Aseem Das, Wei Wu, and Deborah L. McGuinness. "Industrial Strength Ontology Management". In Isabel Cruz, Stefan Decker, Jerome Euzenat, and Deborah L. McGuinness, eds. The Emerging Semantic Web. (Book available from <http://www.iospress.nl/site/html/boek-1381825766.html>). IOS Press, 2002. abstract

90. Deborah L. McGuinness, Richard Fikes, Lynn Andrea Stein, and James Hendler. "DAML-ONT: An Ontology Language for the Semantic Web". In Dieter Fensel, Jim Hendler, Henry Lieberman, and Wolfgang Wahlster, editors. *Spinning the Semantic Web: Bringing the World Wide Web to Its Full Potential*. MIT Press, 2003.
91. Deborah L. McGuinness. "Conceptual Modeling for Distributed Ontology Environments," In the Proceedings of the Eighth International Conference on Conceptual Structures Logical, Linguistic, and Computational Issues (ICCS 2000), August 14-18, 2000, Darmstadt, Germany. Also published in *Lecture Notes in Computer Science, Conceptual Structures: Logical, Linguistic, and Computational Issues*. Volume 1867/2000. ISBN 978-3-54 0-67859-5, pages 100-112. http://dx.doi.org/10.1007/10722280_7
92. Deborah L. McGuinness, Richard Fikes, James Rice, and Steve Wilder, "The Chimaera Ontology Environment," In the Proceedings of the The Seventeenth National Conference on Artificial Intelligence (AAAI 2000), Austin, Texas, July 30 - August 3, 2000.
93. Deborah L. McGuinness, Richard Fikes, James Rice, and Steve Wilder. An Environment for Merging and Testing Large Ontologies. In the Proceedings of the Seventh International Conference on Principles of Knowledge Representation and Reasoning (KR2000), Breckenridge, Colorado, USA. April 12-15, 2000.
94. Deborah L. McGuinness, Ontology-enhanced Search for Primary Care Medical Literature. In the Proceedings of the International Medical Informatics Association Working Group 6- Medical Concept Representation and Natural Language Processing Conference, Phoenix, Arizona, December 16--19, 1999.
95. Franz Baader, Alex Borgida, and Deborah L. McGuinness. "Matching in Description Logics: Preliminary Results," In Proceedings of the Sixth International Conference on Conceptual Structures (ICCS'98), M.-L. Mugnier, M. Chein (editors), *Lecture Notes in Artificial Intelligence*, Springer, 1998. An earlier version appears in in Proceedings of the 1998 International Workshop on Description Logics, Trento, Italy. June, 1998.
96. Deborah L. McGuinness and Peter F. Patel-Schneider. "Usability Issues in Knowledge Representation Systems". In Proceedings of the Fifteenth National Conference on Artificial Intelligence, Madison, Wisconsin, July, 1998. This is an updated version of "Usability Issues in Description Logic Systems" published in Proceedings of International Workshop on Description Logics, Gif sur Yvette, (Paris), France, September, 1997.
97. Deborah L. McGuinness. "Ontological Issues for Knowledge-Enhanced Search". In the Proceedings of Formal Ontology in Information Systems, June 1998. Also in *Frontiers in Artificial Intelligence and Applications*, IOS-Press, Washington, DC, 1998.
98. Deborah L. McGuinness, Harley Manning, and Tom Beattie. "Knowledge Augmented Intranet Search." In Proceedings of Sixth World Wide Web Conference CDROM version, Santa Clara, California, April, 1997.
99. Alex Borgida and Deborah L. McGuinness. "Asking Queries about Frames." In Proceedings of Fifth International Conference on the Principles of Knowledge Representation and Reasoning Cambridge, Massachusetts, November, 1996. Morgan Kaufmann. Also appears in Proceedings of International Workshop on Description Logics, Cambridge, Mass., November 1996.

100. Deborah L. McGuinness and Alex Borgida . ``Explaining Subsumption in Description Logics." In Proceedings of the 14th International Joint Conference on Artificial Intelligence, Montreal, Canada, August, 1995.
101. Deborah L. McGuinness, Lori Alperin Resnick, and Charles Isbell. ``Description Logic in Practice: A CLASSIC: Application." In Proceedings of the 14th International Joint Conference on Artificial Intelligence, Montreal, Canada, August, 1995.
102. Ronald J. Brachman, Peter G. Selfridge, Loren G. Terveen, Boris Altman, Alex Borgida, Fern Halper, Thomas Kirk, Alan Lazar, Deborah L. McGuinness, Lori Alperin Resnick. ``Knowledge Representation Support for Data Archaeology." In Proceedings of the First International Conference on Information and Knowledge Management, November, 1992.
103. Ronald J. Brachman, Alex Borgida, Deborah L. McGuinness, Peter F. Patel-Schneider, and Lori Alperin Resnick. ``The CLASSIC Knowledge Representation System, or, KL-ONE: The Next Generation." Proceedings of the 1992 International Conference on Fifth Generation Computer Systems, Tokyo, Japan, June 1992.
104. Ronald J. Brachman, Alex Borgida, Deborah L. McGuinness, Peter F. Patel-Schneider, and Lori Alperin Resnick. ``Living with CLASSIC: When and How to Use a KL-ONE-Like Language." In Principles of Semantic Networks: Explorations in the representation of knowledge, ed. John Sowa. San Mateo, California: Morgan Kaufmann, 1991, pages 401--456.
105. Peter F. Patel-Schneider, Bernd Owsnicki-Klewe, Alfred Kobsa, Nicola Guarino, Robert MacGregor, William S. Mark, Deborah L. McGuinness, Bernhard Nebel, Albrecht Schmiedel, and John Yen. ``Term Subsumption Languages in Knowledge Representation." *AI Magazine* 11:2 (1990), pages 16--22.
106. Alex Borgida, Ronald J. Brachman, Deborah L. McGuinness, and Lori Alperin Resnick. ``CLASSIC: A Structural Data Model for Objects", Proceedings of the 1989 ACM SIGMOD International Conference on Management of Data, Portland, Oregon, June, 1989, pp. 59--67.
107. Ronald J. Brachman and Deborah L. McGuinness. ``Knowledge Representation, Connectionism, and Conceptual Retrieval", Proceedings of the 1988 ACM SIGIR International Conference on Research and Development in Information Retrieval, Grenoble, France, June, 1988, pp. 161--174.
108. Van E. Kelly and Deborah L. McGuinness. ``Automatic Re-Programming for Robustness", Proceedings of the 1986 IEEE Conference on Global Telecommunications, December, 1986, pp. 417--422.

Natural Science Conference publications (broken out because of different publication standards)

1. McGuinness, D.L., Pinheiro, P., Santos, H., Chastain, K., Klawonn, M. 2015. IN33F-02 Semantic Support for Complex Ecosystem Research Environments. In Proceedings of AGU Fall Meeting 2015 (December 14-18 2015, Moscone Center, San Francisco, CA, US).
2. McGuinness, D.L., Pinheiro, P., Patton, E.W., and Chastain, K. 2014. IN21B-3712 Semantic eScience for Ecosystem Understanding and Monitoring: The Jefferson

- Project Case Study. In Proceedings of AGU Fall Meeting 2014 (December 15-19 2014, Moscone Center, San Francisco, CA, US).
3. Pinheiro, P. and McGuinness, D.L. 2014. Provenance-Enabled Integration of Sensor Network Data. In Proceedings of AGU Fall Meeting 2014 (December 15-19 2014, Moscone Center, San Francisco, CA, US).
 4. Patton, E.W., Pinheiro, P., and McGuinness, D.L. 2014. IN22A-05, Semantically aided interpretation and querying of Jefferson Project data using the SemantEco framework. In Proceedings of AGU Fall Meeting 2014 (December 15-19 2014, Moscone Center, San Francisco, CA, US).
 5. West, P., Michaelis, J., Lebo, T., McGuinness, D., & Fox, P. (December 17, 2014). Citation and Recognition of contributions using Semantic Provenance Knowledge Captured in the OPeNDAP Software Framework. In: AGU Fall Meeting 2014
 6. West, P., Michaelis, J., Lebo, T., & McGuinness, D. (July 8, 2014). Applying Provenance Extensions to OPeNDAP Framework. In: OPeNDAP Developer's Meeting 2014 at ESIP Summer Meeting 2014
 7. Michaelis, J., West, P., Lebo, T., & McGuinness, D. (July 6, 2014). Applying Provenance Extensions to the OPeNDAP Framework. In: ESIP Summer Meeting 2014DataONE User Group Meeting 2014 at ESIP Summer Meeting 2014OPeNDAP Developer's Meeting 2014 at ESIP Summer Meeting 2014
 8. P. West; P.A. Fox; D.L. McGuinness; J.H. Gallagher; D. Holloway; N. Potter. Provenance Capture in Data Access and Data Manipulation Software. IN53C-1575. Proceedings of AGU Fall Meeting 2013 (December 9-13 2013, San Francisco, CA).
 9. E.W. Patton; P. Seyed; D.L. McGuinness . Addressing the Challenges of Multi-Domain Data Integration with the SemantEco Framework. IN52B-02. Proceedings of AGU Fall Meeting 2013 (December 9-13 2013, San Francisco, CA).
 10. P. Seyed; K. Chastain; D.L. McGuinness . Linking Disparate Datasets of the Earth Sciences with the SemantEco Annotator. ED43E-06, Proceedings of AGU Fall Meeting 2013 (December 9-13 2013, San Francisco, CA).
 11. P. Seyed; B. Ashby; I. Khan; E.W. Patton; D.L. McGuinness. SemantGeo: Powering Ecological and Environment Data Discovery and Search with Standards-Based Geospatial Reasoning , IN41A-1599, Proceedings of AGU Fall Meeting 2013 (December 9-13 2013, San Francisco, CA).
 12. McGuinness, D.L. 2012. Community Science – The Next Frontier. In Proceedings of AGU Fall Meeting 2012 (December 3-7 2012, San Francisco, CA).
 13. McGuinness, D.L. 2012. Next Generation Data Environments. In Proceedings of AGU Fall Meeting 2012 (December 3-7 2012, San Francisco, CA).
 14. Wang, H., Wilson, N., and McGuinness, D.L. 2012. Semantic Web Compatible Names and Descriptions for Organisms. In Proceedings of AGU Fall Meeting 2012 (December 3-7 2012, San Francisco, CA).
 15. Zednik, S., Fox, P., and McGuinness, D.L. 2012. A Mark-up Language for Solar Terrestrial Observations and Measurements. In Proceedings of AGU Fall Meeting 2012 (December 3-7 2012, San Francisco, CA).
 16. Michaelis, J., McGuinness, D.L., Zednik, S., West, P., and Fox, P. 2012. Applying Semantics in Dataset Summarization for Solar Data Ingest Pipelines. In Proceedings of AGU Fall Meeting 2012 (December 3-7 2012, San Francisco, CA).

17. Lee, J., McCusker, J., and McGuinness, D.L. 2012. Climate Change, Disaster, and Sentiment Analysis over Social Media Mining. In Proceedings of AGU Fall Meeting 2012 (December 3-7 2012, San Francisco, CA).
18. Wang, P., Zheng, J., Fu, L., Patton, E.W., Lebo, T., Ding, L., Luciano, J.S., and McGuinness, D.L. 2011. Next Generation Environmental Informatics as exemplified by the Tetherless World Semantic Water Quality Portal. In Proceedings of AGU Fall Meeting 2011 (December 5-9 2011)
19. Michaelis, J., Zednik, S., West, P., Fox, P., and McGuinness, D.L. 2010. Extending eScience Provenance with User-Submitted Semantic Annotations. In Proceedings of AGU Fall Meeting 2010 (December 13-17 2010, San Francisco, CA).
20. West, P., Michaelis, J., Fox, P., Zednik, S., and McGuinness, D.L. 2010. Presenting Provenance Based on User Roles: Experiences with a Solar Physics Data Ingest System. In Proceedings of AGU Fall Meeting 2010 (December 13-17 2010, San Francisco, CA).
21. D L McGuinness, P Fox, R Raskin, A K Sinha. Semantics of interdisciplinary data and information integration. In American Geophysical Union, Spring 2009 Joint Assembly, Meeting of the Americas, Toronto, CA, May 24-27, 2009 Eos Trans. AGU 89(53), Fall Meet. Suppl., Abstract IN24A-03
22. P Fox, D L McGuinness, P Pinheiro da Silva, S Zednik, N Del Rio, L Ding, P West, C Chang. Knowledge provenance in science data pipelines; languages, tools and artifacts—what can we now answer? In American Geophysical Union, Spring 2009 Joint Assembly, Meeting of the Americas, Toronto, CA, May 24-27, 2009 Eos Trans. AGU 89(53), Fall Meet. Suppl., Abstract IN24A-06.
23. P. West; P. Fox; D. L. McGuinness. Social and Personal Factors in Semantic Infusion Projects. In American Geophysical Union, Fall 2009 Joint Assembly, San Francisco, CA., Title, Eos Trans. AGU, 90(52), Fall Meet. Suppl., Abstr. IN11B-1058.
24. D. L. McGuinness; P. Fox; C. Chang; L. Ding; Z. Shangguan; P. West; S. Zednik. Provenance-Aware Faceted Search. In American Geophysical Union, Fall 2009 Joint Assembly, San Francisco, CA., Title, Eos Trans. AGU, 90(52), Fall Meet. Suppl., Abstr. IN31B-1002.
25. S. Zednik; P. Fox; D. L. McGuinness. Domain Knowledge and Provenance in Science Data Systems. In American Geophysical Union, Fall 2009 Joint Assembly, San Francisco, CA., Title, Eos Trans. AGU, 90(52), Fall Meet. Suppl., Abstr. IN34B-07,
26. P. Fox; D. L. McGuinness. The Semantic eScience Framework. In American Geophysical Union, Fall 2009 Joint Assembly, San Francisco, CA., Title, Eos Trans. AGU, 90(52), Fall Meet. Suppl., Abstr. IN51B-1042.
27. M. Schildhauer; D. L. McGuinness; L. E. Bermudez; M. Jones. Towards a shared scientific observation model . In American Geophysical Union, Fall 2009 Joint Assembly, San Francisco, CA., Title, Eos Trans. AGU, 90(52), Fall Meet. Suppl., Abstr. IN51B-1046.
28. Deborah McGuinness, Peter Fox, Luca Cinquini, Patrick West, Jose Garcia, James L. Benedict, and Don Middleton. The Virtual Solar-Terrestrial Observatory: A Deployed Semantic Web Application Case Study for Scientific Research. In the proceedings of the Nineteenth Conference on Innovative Applications of Artificial Intelligence (IAAI-07). Vancouver, British Columbia, Canada, July 22-26, 2007.

29. James L. Benedict, Deborah L. McGuinness, and Peter Fox. A Semantic Web-based Methodology for Building Conceptual Models of Scientific Information. In American Geophysical Union, Fall Meeting (AGU2006), San Francisco, Ca., December, 2007. Eos Trans. AGU 88(52), Fall Meet. Suppl., Abstract IN53A-0950.
30. Luca Cinquini, Deborah L. McGuinness, Peter Fox, Patrick West, Anthony Darnell, Jose Garcia, James L. Benedict, Don Middleton. Semantics and interoperability in the Virtual Solar-Terrestrial Observatory. In American Geophysical Union, Fall Meeting (AGU2006), San Francisco, Ca., December, 2006. Eos Trans. AGU 87(52), Fall Meet. Suppl., Abstract IN41B-0890.
31. Tony Darnell, Luca Cinquini, Peter Fox, Patrick West, Don Middleton, Deborah L. McGuinness, James L. Benedict. Unifying Workflows for Finding and Using Data Across Discipline Boundaries. In American Geophysical Union, Fall Meeting (AGU2006), San Francisco, Ca., December, 2006. Eos Trans. AGU 87(52), Fall Meet. Suppl., Abstract IN54A-08.
32. Peter Fox, Deborah L. McGuinness, Rob Raskin, and A. Krishna Sinha. The Technology Behind Data Integration with Semantics. In American Geophysical Union, Fall Meeting (AGU2006), San Francisco, Ca., December, 2006. Eos Trans. AGU 87(52), Fall Meet. Suppl., Abstract IN24A-05.
33. Deborah L. McGuinness, Peter Fox, Luca Cinquini, James L. Benedict, Patrick West, Jose Garcia, Anthony Darnell, Don Middleton. Semantic Web Cyberinfrastructure for Virtual Observatories. In American Geophysical Union, Fall Meeting (AGU2006), San Francisco, Ca., December, 2006. Eos Trans. AGU 87(52), Fall Meet. Suppl., Abstract IN43D-02.
34. Don Middleton, Deborah L. McGuinness, and Peter Fox. Progress in Earth and Space Science Infrastructure: Grids, Frameworks, and Semantics. In American Geophysical Union, Fall Meeting (AGU2006), San Francisco, Ca., December, 2006. Eos Trans. AGU 87(52), Fall Meet. Suppl., Abstract IN21A-1210.
35. Rob Raskin, Peter Fox, Deborah L. McGuinness, and A. Krishna Sinha. Semantically-Enabled Science Data Integration: Current Progress. In American Geophysical Union, Fall Meeting (AGU2006), San Francisco, Ca., December, 2006. Eos Trans. AGU 87(52), Fall Meet. Suppl., Abstract IN43D-05.
36. Patrick West, Luca Cinquini, Peter Fox, Deborah L. McGuinness, James L. Benedict, Anthony Darnell, Jose Garcia, Don Middleton. The Virtual Solar-Terrestrial Observatory Production Release. In American Geophysical Union, Fall Meeting (AGU2006), San Francisco, Ca., December, 2006. Eos Trans. AGU 87(52), Fall Meet. Suppl., Abstract IN54A-03.
37. Peter Fox, Linda Gunderson, Kerstin Lehnert, Deborah L. McGuinness, Krishna Sinha, Walt Snyder. Toward Broad Community Collaboration in Geoinformatics. EOS, Vol. 87, No. 46, November 14, 2006.
<http://www.agu.org/journals/eo/eo0646/2006EO460005.pdf>
38. Peter Fox, Deborah L. McGuinness, Don Middleton, Luca Cinquini, J. Anthony Darnell, Jose Garcia, Patrick West, James Benedict, and Stan Solomon. Semantically-Enabled Large-Scale Science Data Repositories. In the Proceedings of the Fifth International Semantic Web Conference, Athens, Ga, November 5-9, 2006.
http://www.ksl.stanford.edu/KSL_Abstacts/KSL-06-19.html.

39. Deborah L. McGuinness, Peter Fox, Luca Cinquini, J. Anthony Darnell, Patrick West, James L. Benedict, Jose Garcia, and Don Middleton. Ontology-Enabled Virtual Observatories: Semantic Integration in Practice. In the Proceedings of the Fifth International Semantic Web Conference, Athens, Ga, November 5-9, 2006. Poster paper accompanies full conference paper.
http://www.ksl.stanford.edu/KSL_Abstracts/KSL-06-20.html
40. Peter A. Fox, Deborah L. McGuinness, Don Middleton, Luca Cinquini, Jose Garcia, Patrick West, J. Anthony Darnell, James L. Benedict. The Virtual Solar-Terrestrial Observatory: interdisciplinary data-driven science, in Abstracts for the International Astronomical Union XXVIth General Assembly, August 14-25, 2006, Prague, Czech Republic, SPS3-78, p. 464.
41. Deborah L. McGuinness, A. Krishna Sinha, Peter Fox, Rob Raskin, Grank Heiken, Calvin Barnes, Ken Wohletz, Dina Venezky, Kai Lin. Towards a Reference Volcano Ontology for Semantic Scientific Data Integration. American Geophysical Union Joint Assembly, Baltimore, Maryland, May 23-26, 2006.
42. Deborah L. McGuinness, Peter Fox, and Don Middleton. Solar-Terrestrial Ontologies. Proceedings of the Geoinformatics Conference, Reston, Virginia, May 10-12, 2006. [GeoInformatics](#)
43. Deborah L. McGuinness. Ontologies and the Semantic Web: Key Enablers for Earth and Space Science Advances. In American Geophysical Union, Fall Meeting (AGU2005), San Francisco, Ca., December, 2005. Eos Trans. AGU 86(52), Fall Meet. Suppl., Abstract IN41B-01.
44. Deborah L. McGuinness, Peter Fox, Don Middleton, Jose Garcia, Luca Cinquini, J. A. Darnell, James L. Benedict. Solar-Terrestrial Ontology Development. In American Geophysical Union, Fall Meeting (AGU2005), San Francisco, Ca., December, 2005. Eos Trans. AGU 86(52), Fall Meet. Suppl., Abstract IN43A-0324.
45. Peter Fox, Don Middleton, Deborah L. McGuinness, S. Solomon, Jose Garcia, Luca Cinquini, P. West, James L. Benedict. The Virtual Solar-Terrestrial Observatory: How is the paradigm working? In American Geophysical Union, Fall Meeting (AGU2005), San Francisco, Ca., December, 2005. Eos Trans. AGU 86(52), Fall Meet. Suppl., Abstract IN31B-1159.
46. Peter Fox, E. CoBabe-Ammann, Don Middleton, Deborah L. McGuinness. Scientific Virtual Observatories Working for Education? In American Geophysical Union, Fall Meeting (AGU2005), San Francisco, Ca., December, 2005. Eos Trans. AGU 86(52), Fall Meet. Suppl., Abstract ED11D-1121.
47. Jian Zhong, Deborah L. McGuinness, M. Antonellini, A. Aydin. Ontology for Structural Geology. In American Geophysical Union, Fall Meeting (AGU2005), San Francisco, Ca., December, 2005. Eos Trans. AGU 86(52), Fall Meet. Suppl., Abstract IN43A-0323.
48. Krishna Sinha, K. Lin, Rob Raskin, C. Barnes, Deborah L. McGuinness, J. Najdi. Geo-Ontology: Empowering new Discoveries in Earth Sciences. In American Geophysical Union, Fall Meeting (AGU2005), San Francisco, Ca., December, 2005. Eos Trans. AGU 86(52), Fall Meet. Suppl., Abstract IN41B-04.

Selected Standards Documents

49. Tim Lebo, Satya Sahoo, and Deborah L. McGuinness. PROV-O: The PROV Ontology. World Wide Web Consortium (W3C) Recommendation. April 30, 2013. Available from <http://www.w3.org/TR/prov-o/>.
50. Jie Bao, Elisa F. Kendall, Deborah L. McGuinness, Peter F. Patel-Schneider, eds. OWL 2 Web Ontology Language: Quick Reference Guide (Second Edition). W3C Recommendation, 11 December 2012, <http://www.w3.org/TR/2012/REC-owl2-quick-reference-20121211/>. Latest version available at <http://www.w3.org/TR/owl2-quick-reference/>.
51. Michael K. Smith, Chris Welty, and Deborah L. McGuinness. OWL Web Ontology Language Guide. World Wide Web Consortium (W3C) Recommendation. February 10, 2004. Available from <http://www.w3.org/TR/owl-guide/>
52. Deborah L. McGuinness and Frank van Harmelen. OWL Web Ontology Language Overview. World Wide Web Consortium (W3C) Recommendation. February 10, 2004. Available from <http://www.w3.org/TR/owl-features/> .
53. Michael K. Smith, Chris Welty, and Deborah L. McGuinness. OWL Web Ontology Language Guide. World Wide Web Consortium (W3C) Recommendation. February 10, 2004. Available from <http://www.w3.org/TR/owl-guide/> .
54. Mike Dean, Guus Schreiber, Frank van Harmelen, James Hendler, Ian Horrocks, Deborah L. McGuinness, Peter F. Patel-Schneider, and Lynn Andrea Stein. OWL Web Ontology Language Reference. World Wide Web Consortium (W3C) Recommendation. February 10, 2004. Available from <http://www.w3.org/TR/owl-ref/> .
55. Dan Connolly, Frank van Harmelen, Ian Horrocks, Deborah L. McGuinness, Peter F. Patel-Schneider, and Lynn Andrea Stein. DAML+OIL (March 2001) Reference Description. World Wide Web Committee (W3C) Note 18 December 2001.
56. Richard Fikes and Deborah L. McGuinness. An Axiomatic Semantics for RDF, RDF-S, and DAML+OIL (March 2001). World Wide Web Committee (W3C) Note 18 December 2001.
57. Dan Connolly, Frank van Harmelen, Ian Horrocks, Deborah L. McGuinness, Peter F. Patel-Schneider, and Lynn Andrea Stein. Annotated DAML+OIL Ontology Markup . World Wide Web Committee (W3C) Note 18 December 2001.

Technical Reports and Workshop Papers

More than 200 technical reports or workshop papers dating 1986-pres.

1. Evan Patton, Divya Ravichandar, Matthew Urschel, Kristin Bennett, Anna Dyson, Karyn Rogers, Cynthia Collins and Deborah McGuinness. Augmenting Functional Microbiome Research using a Semantically-Enabled Analytical Infrastructure. Proceedings of Bio-Ontologies, Orlando, Florida, July 8-9, 2016,
2. Erickson, J.S., Sheehan, J., Bennett, K.P., McGuinness, D.L. 2016. Addressing Scientific Rigor in Data Analytics Using Semantic Workflows. International Provenance and Annotation Workshop. Pp 187-190.
3. Pinheiro, P., McGuinness, D.L., and Santos, H. 2015. Human-Aware Sensor Network Ontology: Semantic Support for Empirical Data Collection. In Proceedings of 5th Workshop on Linked Science 2015— Best Practices and the Road Ahead (LISC2015) at International Semantic Web Conference (ISWC) 2015 (October 12-September 12 2015, Bethlehem, PA, USA).

4. Pinheiro, P., McGuinness, D.L., and Santos, H. 2015. Human-Aware Sensor Network Ontology: Semantic Support for Empirical Data Collection. In Proceedings of International Semantic Web Conference (ISWC) 2015 (October 11-15 2015, Bethlehem, PA, US).
5. Santos, H., Furtado, V., Pinheiro, P., and McGuinness, D.L. 2015. Contextual Data Collection for Smart Cities. In Proceedings of The 6th Workshop on Semantics for Smarter Cities (S4SC 2015) at International Semantic Web Conference (ISWC) 2015 (October 12 2015, Bethlehem, PA, USA).
6. Patton, E.W., Brown, E., Poegel, M., De Los Santos, H., Fasano, C.A., Bennett, K., and McGuinness, D.L. 2015. SemNExT: A Framework for Semantically Integrating and Exploring Numeric Analyses. In Proceedings of SemStats 2015 (October 11-12 2015, Bethlehem, PA).
7. Laura Kinkead, Paulo Pinheiro, Deborah L. McGuinness: Automating the Collection of Semantic Sensor Network Metadata in the Field with Mobile Applications. . In Proceedings of MoDeST 2015 (October 11-12 2015, Bethlehem, PA).
8. Yue Liu, Tao Ge, Kusum S. Mathews, Heng Ji and Deborah L. McGuinness. 2015. Exploiting Task-Oriented Resources to Learn Word Embeddings for Clinical Abbreviation Expansion. Proc. ACL2015 BioNLP Workshop.
9. Patton, E.W. and McGuinness, D.L. 2014. Toward Next Generation Integrative Semantic Health Information Assistants. In Proceedings of Expanding the Boundaries of Health Informatics using AI (HIAI14) (November 13-15 2014, Arlington, VA, USA).
10. Zheng, J., Howsmon, D., Zhang, B., Hahn, J., McGuinness, D.L., Hendler, J., and Ji, H. 2014. Entity Linking for Biomedical Literature. In Proceedings of ACM 8th International Workshop on Data and Text Mining in Bioinformatics (November 7 2014, Shanghai, China). tw.rpi.edu/web/doc/BioEL

Selected Invited Lectures

1. Invited talk for Open Travel Alliance. Future of Search Technologies. Orlando, Florida. April 19, 2016.
2. Invited talk for Bloomberg. Ontologies and the Semantic Web. New York City, NY January 12, 2016.
3. Invited talk for Gates Foundation Think Tank. Healthy Birth, Growth, and Development Ontology Framework. Online presentation. January 6, 2016.
4. Invited talk. Semantics and Ontologies for Data Structures and Standards Working Group. National Institute of Environmental Health Services (NIH/NIEHS), Durham, NC, November 18-19, 2015.
5. Invited talk. National Institute of Environmental Health Sciences Superfund Research Talk Series. Child Health Exposure Analysis Repository Data Science. Virtual Meeting. November 4, 2015.
6. Invited Panel Moderator and Introductory Remarks. Future of Precision Medicine. Sinai Innovations, New York City, NY. October 28, 2015.
7. Invited Panel Moderator and Introductory Remarks. Alzheimers and Cognition Workshop at Icahn Mount Sinai School of Medicine, New York City, NY, Sept 16, 2015.

8. Invited Tutorial. Ontologies 101. Smart Data Conference. San Jose, Ca., August 18, 2015.
9. Invited talk. Semantic Informatics. MITRE. Bedford, Mass. July 23, 2015.
10. Invited talk. Ontologies and Data Science for Child Health Exposure. Mount Sinai School of Medicine. New York City, NY., July 22, 2015.
11. Invited talk for Optum Labs Technical Overview. Semantic Numeric Exploration Technology, July 8, 2015.
12. Invited talk for Pacific Northwest National Labs. Emerging Trends in Semantic Technologies, June 23, 2015. Seattle, Washington.
13. Invited talk. Workshop on Platform for Experimental and Collaborative Ethnography (PECE). Semantic eScience and Semantic eHumanity Methodology. Troy, NY. May 9, 2015.
14. Invited lecture. Semantic Data Integration and Ontologies. SUNY Polytechnic Institute Colleges of Nanoscale Science & Engineering NanoFab East, Albany, NY, March 9, 2015
15. Invited talk for the Gates Foundation Healthy Birth, Growth, and Development program invitational meeting. Washington, DC. February 25, 2015.
16. Invited presentation for the IBM-RPI-Fund Jefferson Project Meeting. Human Aware Data Collection Framework. February 4, 2015.
17. Invited talk for Dana Farber-RPI Health Analytics Meeting. Semantics Health Informatics. Dana Farber. Cambridge, Mass. January 8, 2015.
18. Invited talk for Optum Labs-RPI Health Informatics Day, Semantics and Health Analytics. November 4, 2014. Troy NY.
19. Invited talk for Medidata Research Day, Semantic Technologies and Health Informatics). October 6, 2014, New York, NY.
20. Invited talk for Mount Sinai-RPI Data Day, Semantic Health Informatics, September 4, 2014, Troy, NY.
21. Invited talk for Optum Labs Partners Day, June 24, 2014, Virtual presentation.
22. Invited talk for GE-RPI Internet of Things Day, Enabling Next Generation Context-Aware Personalized Advisors, April 4, 2014, Troy NY.
23. Keynote for Conference on Semantics for Healthcare and Life Sciences (CSHALS) 2014 (February 26-28 2014), Boston, MA.
24. IGNITE Talk for NY Innovates, Next Generation Semantic Advisors, Troy NY, Dec 18, 2013.
25. Invited tutorial on Ontologies, Semantic Tech Conference. San Francisco, CA. June 3, 2013.
26. Invited talk for DataONE working group on Semantic Technologies, Santa Barbara, Ca., April 16, 2013.
27. Invited talk for the Web Science Trust on Health Web Science, March 27, 2013.
28. Invited Keynote on at the Object Management Group Spring Meeting in Reston Virginia on Next Generation Data Environments. March 20, 2013.
29. Invited presentation at AGU 2012 on Community Science – December 2012
30. Invited speaker at the American Geophysical Union’s fall meeting on Next Generation Data Environments (in the Data Interoperability and Interuse Solutions) – December, 2012.

31. Invited Keynote Speaker at NSF-funded invitational Big Data meeting on Data Semantics – Rochester University, October 2012.
32. Invited Keynote Speaker at the Earth System Information Partners Meeting, Madison Wisconsin, July 18, 2012.
33. Invited Speaker at the Microsoft Faculty Summit, July 16, 2012 Redmond, Washington.
34. Invited tutorial at SemTech 2012 – June 2012.
35. Invited Keynote Speaker for Linked Open Data for Team Science Conference, April, 19, 2012, Chicago
36. Invited Keynote Speaker for Travel Alliance’s Open Travel Conference in Miami, April, 2012
37. Invited talk for Symposium Public Health and Health Services Cyber Infrastructure within the HICSS 2011 conference as the exemplar for Health 2.0 challenges, January 2011
38. Health Informatics breakout session chair at TED Feb 2011, Long Beach, California.
39. Interviewed by the Canadian Broadcast System (March 7, 2011 and aired on June 26, 2011) on the semantic sommelier and linked data. This resulted I believe from an article Gabrielle wrote about my work that spread to have over 100 citations and republications within the first 48 hours of publishing. I was interviewed by a Spanish journalist as well after the article came out. Some of these can be seen from <http://tw.rpi.edu/web/project/Wineagent/announcements> .
40. Keynote invited talk in Melbourne Australia at the Data Provenance and Data Management for eScience meeting, March 18-19, 2011. Followed by invited visit to CSIRO in Hobart Tasmania where I also have two invited talks and furthered the RPI /CSIRO memorandum of understanding.in
41. Invited talk at the National Cancer Institute on Semantic Technologies for Population Science, April 7, 2011 – NCI headquarters.
42. Invited talk for Scientific Observations Network meeting, Santa Barbara, April 18, 2011.
43. Keynote at Data Day 2011 at Pitney Bowes, Stanford, Ct, April 26, 2011.
44. Invited talk at the Context Awareness for Mobile Services meeting at Qualcomm, San Diego, CA September 29, 2011.
45. Invited tutorial on Ontologies for Semantic Technologies 2011, June 5, 2011, San Francisco, CA.
46. Keynote on Ontologies and the Semantic Web at the Microsoft Faculty Summit – July 17-19, 2011, Seattle.
47. Invited panel presentation at the NSF datascience meeting at RPI September 12-14, 2011.
48. Invited talk on the future of the Web at Victoria University, Wellington NZ, September 21, 2011.
49. Keynote on Linked Data for Science for the square kilometer array meeting in Wellington NZ, September 22, 2011.
50. Keynote on Ontologies come of Age at a workshop named after a paper I wrote 11 years ago. October 24, 2011, Bonn, Germany.
51. Invited IGNITE talk at the American Geophysical Union meeting, San Francisco, December 7, 2011.

52. Invited talk for Hearst Publishing, January 11, 2010, Troy, NY.
53. Invited talk for NIH population science division, February 5, 2010. Washington, DC.
54. Linked Data breakout session chair at TED 2010 – February 12, 2010, Long Beach, California.
55. Invited talk on Linked Data for Linked Data meets AI Workshop at AAAI Spring Symposium Series, March 22, 2010, Stanford, CA.
56. Invited talk on Semantic Technologies for GE/GF/IBM meetings, April 7, 2010, Troy, NY.
57. Invited tutorial on Ontologies for Semantic Technologies 2010, June 22, 2010, San Francisco, CA.
58. Invited talk on Health Informatics and Linked Data for the NYC Semantic Web Meetup, September 2, 2010, New York, New York.
59. Invited talk on Linked Data for the British Royal Society, Sept. 30, 2010, Kavli, UK.
60. Invited talk on Ontologies and the Semantic Web at Tsinghua University, November 4, 2010, Beijing, China.
61. Invited Keynote for Semantic Web Provenance Management Workshop, co-located with the International Semantic Web Conference, November 7, 2010, Shanghai, China.
62. Semantic Integration of Scientific Information. Invited Keynote for the Conference on Spatial Information Theory. Melbourne, Australia, September 20-22, 2007.
63. IKRIS Knowledge Language. Invited talk for the Extensible MetaData Registry Summer 2007 Meeting. Berkeley, Cal, August 20-24, 2007.
64. Issues in Semantic Information Integration. Invited Keynote for the Semantic eScience Workshop. Co-located with the Association for Artificial Intelligence Conference, Vancouver, Canada. July 22-23, 2007.
65. The Evolving Semantic Web: Progress and Directions. Invited talk for the Dagstuhl Workshop on Reasoning with Biomedical Information. Dagstuhl Castle, Wadern, Germany, June 22, 2007.
66. Semantically Enabling Computational Legal Information Systems. Invited keynote talk for the AI and Law Conference, Stanford, CA., June 4-8, 2007.
67. Semantic Web Perspectives. Invited talk for the NIST Interoperability Ontology Summit Meeting, Gaithersburg, Maryland. April 24-25, 2007.
68. Emerging Trends in Web Research: Transparent, Trustworthy Applications and Semantically-Enabled Scientific Data Integration. Invited talk for the Duke Information Science and Information Studies Lecture Series, Duke University, Durham, NC, January 16, 2007.
69. Trends in Semantic Web Research. Invited talk. University of Central Florida, Orlando, Florida, January 12, 2007.
70. GeoSpatial Ontologies. Invited talk for the Terra Cognita - Directions to the Geospatial Semantic Web Workshop, in conjunction with the International Semantic Web Conference, Athens, Georgia, November 6, 2006.
71. Information Integration Issues in Scientific Applications. Invited talk for the NSF Workshop on Information Integration. University of Pennsylvania, Philadelphia, Pennsylvania, October 25-27, 2006. slides, paper.
72. Trends in Semantic Technologies. Invited talk for RPI Colloquium Series. Troy, NY, October 24, 2006.

73. Semantic Web Progress and Directions. Invited talk for Object Modeling Group Service Oriented Architecture Meeting. Burlingame, Ca., October 16-19, 2006.
74. Explanation infrastructure supporting transparency and accountability. Invited talk for the TAMI/Portia Workshop on Privacy and Accountability, MIT, Cambridge, Mass, June 28-29, 2006.
75. Solar Terrestrial Ontologies. Invited talk for the GeoInformatics conference, Reston, Virginia, May 11-12, 2006.
76. Two Emerging Trends in the Semantic Web: Trust and Semantic Integration of Scientific Data. Invited talk for the Norwegian Semantic Days, Stavanger, Norway, April 26-27, 2006. Extended version of the talk repeated at University of Trondheim, April 28, 2006.
77. The Future of the Knowledge Principle and Knowledge Systems. Ed Feigenbaum's Festschrift. Stanford University, Stanford, CA, March 26, 2006.
78. New Directions for the Semantic Web. Object Management Group (OMG) Service-Oriented Architecture, Meta Data Architecture, and Web Services Workshop: Integrating the Enterprise, and Beyond, Fairfax, Va, March 30, 2006.
79. Making Web Applications Trustable. Keynote Address for the Semantic Technology Conference. San Jose, California, March 8, 2006.
80. Ontologies and the Semantic Web: Key Enablers for Earth and Space Science Advances. Invited talk for the American Geophysical Union AGU Fall Meeting, Earth and Space Science Informatics Division, Moscone Center, San Francisco, CA, Dec 8, 2005.
81. The Future of Proof and Trust on the Web. Invited talk for Pacific Northwest National Lab Symposium. Richland, Wa., August 5, 2005.
82. Why Should You Trust Answers from the Web. Invited talk for the Joint Conference on Information Sciences, Web Intelligence and Security Track, Salt Lake City, Utah, July 23, 2005.
83. The Semantic Web and Digital Libraries as Knowledge Systems. Invited talk for Digital Libraries: Cyberinfrastructure for Research and Education (JCDL2005). International Scientific Data, Standards, and Digital Libraries Track. Denver, Colorado, June 11, 2005.
84. Semantically-Enabled Explanations of Text Analysis Results. Invited talk for the Department of Homeland Security Advanced Scientific Computing Program Text Analysis Workshop, Alexandria, Virginia, May 25, 2005.
85. The Substance of the Semantic Web. Invited talk for the Semantic Web Applications for National Security. Washington, DC, April 7, 2005.
86. The Semantic Web: Infrastructure for the Next Generation Web Applications and Services. Invited talk for the Object Modeling Group (OMG) Meeting on Model Driven Architecture and Web Services. agenda. Orlando, Florida, March 24, 2005.
87. Ontologies and Ontological Engineering. Invited talk for NSF Geo-Ontology Workshop. San Diego Super Computer Center, San Diego, Ca., March 3-4, 2005.
88. Explaining Results. Invited Talk for Sierra Nevada Corporation's Technical Exchange Meeting, San Antonio, Texas, February 22-23, 2005.
89. Explainable Semantic Discovery Services. Stanford Networking Research Center Symposium. Stanford, Ca., February 17, 2005.

90. Ontologies and the Semantic Web. Invited tutorial series for the National Geospatial Intelligence Agency. August 9, 2004.
91. Explaining Information: Increasing Reliability, Trust, and Reuse. Invited talk for the IBM Almaden Research Center New Paradigms in Using Computers: What can I do with Way too much Information? Almaden, Ca., August 4, 2004. Powerpoint
92. Explaining Information Extraction. Invited talk for the DARPA Information Processing Technology Office Workshop on Unstructure Information Management Architecture. IBM Watson Research Laboratory, New York, June 17, 2004.
93. The Future of the Semantic Web. Invited talk for the SDForum Semantic Technologies Seminar. April 21, 2004, PARC-George E. Pake Auditorium, Palo Alto, CA.
94. Ontologies for Science. Invited talk for Genentech's Corporate Information Technology Symposium, March 1, 2004.
95. Ontologies and the Semantic Web. Invited talk for The Council of Geographic Names Authorities (COGNA 2003). Asilomar, Pacific Grove, CA. October 3, 2003.
96. Explanation: The Next Phase in Question Answering Systems. Distinguished Lecture Series, Berkeley Initiatives in Soft Computing, September 30, 2003.
97. Ontologies for Information Fusion. Invited talk for Information Fusion 2003, Cairns Australia, July 9, 2003.
98. Ontologies Come of Age. Invited talk for Norwegian Trade Council. June 18, 2003.
99. Ontologies and the Semantic Web. Invited talk for the BBN Semantic Web Days, Falls Church, Va., June 12, 2003.
100. Knowledge Representation for Question Answering . Invited talk for New Directions in Question Answering American Association for Artificial Intelligence Spring Symposium Series. Stanford, CA March, 2003.
101. The Semantic Web: Implications for the Future of eHealth. Invited keynote talk for EHealth Developers' Summit. Tempe, Arizona, November 7, 2002.
102. The Semantic Web: Current and Future State and its potential for cyberinfrastructure for Environmental Research and Education. Invited talk for the National Science Foundation's Invitational Workshop on Cyberinfrastructure for Environmental Research and Education, National Center for Atmospheric Research, Boulder Colorado, October 30 - November 1, 2002.
103. The semantic web: State of the art and implications for language processing. AAAI Semantic Web Meets Language Resources Workshop. Edmonton, Canada. July 28, 2002.
104. Explanation for Query Answering. Invited talk for the Workshop on Mining Answers from Texts and Knowledge Bases American Association for Artificial Intelligence Spring Symposium Workshop Series. Stanford, University March, 2002.
105. Ontologies for E-commerce. Invited talk and panel participation. FOIS 2001 Ogunquit, Maine, USA , October 17-19, 2001.
106. The Semantic Web. International Conference on Conceptual Structures, Stanford, Ca., August, 2001.
107. The Future of the Web. Keynote address for the International Conference on Communications, Helsinki, Finland, June 2001.
108. The Semantic Web. Nokia Research Center, Helsinki, Finland, June 2001.

109. Ontologies - What you should know. Invited talk for the Naval War College, Newport Rhode Island. April, 2001.
110. Ontologies. Invited talk for DARPA Technology Transfer Meeting, Arlington, Va., February, 2001.
111. Trends in Ontologies. Invited talk for Sun Micro Systems, Menlo Park, California. January, 2001.
112. Ontology Environments. Free University of Amsterdam. September 19, 2000.
113. Conceptual Modeling for Distributed Ontology Environments. Invited talk for the 8th International Conference on Conceptual Structures Logical, Linguistic, and Computational Issues. August 14-18, 2000, Darmstadt, Germany.
114. The "Pull" for Ontologies. Invited talk for the Dagstuhl Semantics for the Web Seminar March 19-24, 2000, Schloss Dagstuhl, International Conference and Research Center for Computer Science, Wadern, Germany.
115. Ontology-enhanced Search for Medical Applications. Invited talk for the International Medical Informatics Association Working Group 6- Medical Concept Representation and Natural Language Processing Conference, Phoenix, Arizona, December 16--19, 1999.
116. The High Performance Knowledge Base Project. Invited talk for the International Workshop on Description Logics, Linkoping, Sweden. July, 1999.
117. Ontologies bring meaning to the web. Invited Panel presentation for AAAI 1999. Orlando, Florida. July 22, 1999.
118. Applications of Description Logics. Invited Plenary Address for KRUSE 97 (Knowledge Retrieval, Use, and Storage for Efficiency), Vancouver, BC, Canada. August, 1997.
119. Usability Issues in Description Logics. Plenary talk for working group on Description Logics as a modeling tool for applications, International Workshop on Description Logics, Gif Sur Yvette, France, September, 1997.
120. Description Logics and Configuration Applications. AAAI 96 Fall Symposium Workshop on Configuration. Invited Plenary Address. Cambridge, Mass. November, 1996.
121. Beyond Standard Expressive and Inferential Power: Embedding Description Logics in Industrial Applications: International Workshop on Description Logics, Cambridge, Massachusetts, November, 1996.
122. Configuration Symposium Report: AAAI Fall Symposium Series Evening Lecture, Cambridge, Mass., 1996.
123. Issues in Description Logics: Workshop Report The Principles of Knowledge Representation and Reasoning Conference. Cambridge, Mass., November, 1996.
124. Description Logic-based Knowledge Representation Systems The Second International Knowledge Retrieval, use, and Storage for Efficiency Symposium, Santa Cruz, California, 1995
125. The CLASSIC Knowledge Representation System and Some of its Uses: AT&T Technology Transfer Days, Naperville, Il. December 7, 1994, Indian Hill Court, Il., July 7, 1994, Red Hill, NJ., May 20, 1994, and Middletown, NJ March 9, 1993.
126. PROSE and the CLASSIC Knowledge Representation System: AT&T Science Fair, Murray Hill, December, 1992.

127. Issues in Explainable Description Logics: Intelligent Systems Lecture Series, University of Pittsburgh, March, 1993
128. Applications of Description Logics: The LOOM User's Workshop, Information Sciences Institute, Marina del Rey, California, 1992.
129. Knowledge Bases for Fun and Profit : Women in Research Lecture Series, AT&T Bell Laboratories, Murray Hill, NJ, May, 20, 1992
130. Explanation in Description Logics: AAAI Workshop on Explanation, Boston, Massachusetts, July 30, 1990.
131. Knowledge Base Management Systems and The CLASSIC Knowledge Representation System, Software Systems Day, AT&T Bell Laboratories, Red Hill, June 21, 1990.
132. Description Logic-based Knowledge Representation Systems, University of Colorado at Boulder Colloquium, July 5, 1989.
133. Using Connectionism to Support Flexible Description Matching: AT&T Artificial Intelligence Days, October, 1988.

Fellowships and Awards

- Fellow of the American Association for the Advancement of Science (AAAS), 2013 “for contributions to the Semantic Web, knowledge representation, and reasoning environments.”
- Robert Englemore Memorial Association for the Advancement of Artificial Intelligence (AAAI) Award, 2013 “for leadership in Semantic Web research and in bridging AI and eScience, significant contributions to deployed AI applications, and extensive service to the AI community.”
- Best Paper Award, 2013, 46th Hawaii International Conference on Systems Science (HICSS)
- Informatics Advisory Board, Encyclopedia of Life, 2013-present
- Fellow of the Web Science Research Initiative, April 2007.
- Deployed application award from the Innovative Applications of Artificial Intelligence Conference for the Virtual Solar Terrestrial Observatory, Vancouver, Canada, 2007.
- Deployed application award from the Innovative Applications of Artificial Intelligence Conference, for the General Motors Variation Reduction Advisor, San Jose, 2005.
- Duke University [Honored Alumna](#), December 2002.
- Doctoral Support Scholarship program - Bell Labs - 1984-through Ph.D.,
- OYOC Scholarship program - Bell Labs - 1981,
- Duke University Mathematics Award (1980),
- Phi Eta Sigma (1979),
- Phi Beta Kappa (1979),
- Panhellenic award for academic excellence (1979),
- Deans List (76-80 - Duke, 80-81 Berkeley, 84-on at Rutgers),
- A.B. Duke Scholar, 1976

- Phi Beta Kappa key award, 1976
Valedictorian Springfield High School, 1976.
- Honorary Listings
 - Who's Who in America*
 - Who's Who in the East*
 - Who's Who in American Education*
 - American Men and Women of Science*
 - International Who's Who of Professionals*
 - Who's Who in Science and Engineering*

Research Advising RPI

Post Doctoral Advisor

- Xixi Luo, Dec 2013-present, RPI and University of New Mexico
- Patrice Seyed, June 2012-Dec 2013, RPI & University of New Mexico,
- Jie Bao (co-adviser), RPI, 2/08 – 2011 – moved to Samsung
- Li Ding, 2006-2011, Stanford and later RPI , moved to Qualcomm
- Paulo Pinheiro da Silva, 2002-2005, Stanford, moved to Univ of Texas El Paso

Student Advising

Rensselaer Polytechnic Institute

PhD Students who have completed degree requirements

- Jiao Tao (Computer Science), Thesis: ``Integrity Constraints for the Semantic Web'', March 2012. Moved to Oracle.
- Alvaro Graves Fuenzalida (Cog Sci), Thesis: Improving The Use Of Open Government Data Using Visualizations, November 2013, w. J. Hendler
- Xian Li (Cog Sci), Thesis: Dynamics of Investor Attention on the Social Web, w. J. Hendler December 2013. Moved to Google.
- James Michaelis (Cognitive Science). Thesis: A Methodology for Evaluation of Provenance-based User Interfaces. Completed 12/2014.
- James McCusker (Computer Science). Thesis: WebSig: A Digital Signature Framework for the Web. Completed 2015.
- Dominic DiFranzo, (Cognitive Science), 2015 Thesis: The Semantic eHumanties Methodology: Same but Different . w. J. Hendler
- Evan Patton (Computer Science). Thesis Energy-Aware Reasoning Agents for the Mobile Semantic Web. Completed July 2016.

Masters Students

- Ping Wang (Computer Science), June 2012, Thesis: Semantically Enabling Next Generation Environmental Informatics Portals. Moved to Amazon.
- James Michaelis (Computer Science), June 2011, Thesis: TWPL: A Protocol for Managing RDF-Encoded Provenance Records.
- Laura Kinkead (Computer Science AND Biology), June 2015. Thesis: Automating Semantic Metadata Collection in the Field.

Previous advising:

- Alyssa Glass, Stanford Ph.D., Thesis: ``Integrity Constraints for the Semantic Web'', Stanford, July 2010. Moved to Yahoo Research.
- James McCusker, RPI Computer Science Ph.D. Thesis: WebSig: “A Digital Signature Framework for the Web”. July 2015. Moved to 5AM Solutions.
- James Michaelis, RPI Cognitive Science Ph.D. Thesis: “Towards a Methodology for Evaluation of Provenance-Based User Interfaces”, May 2015. Moved to Army Research labs.
- Laura Kinkead. RPI Computer Science MS. Thesis: Automating Metadata Collection in the Field “. May 2015. Moved to Pitney Bowes.
- Ping Wang. RPI Computer Science MS. Thesis: Semantically Enabling Next Generation Environmental Informatics Portals. June 2012. Moved to Amazon, then Microsoft.
- James Michaelis. RPI Computer Science MS. Thesis: May 2011.
- Jian, Zhong, Stanford Ph.D. in Geology, Stanford 2008
- Honglei Zeng, Stanford MS, 2008
- Mayukh Bhaowal, Stanford CS M.S. 2007
- Dhyanesh Narayanan, Stanford CS M.S., 2006
- Jessica Jenkins, Stanford CS M.S., 2006, also advised her as a research programmer for 3 years.
- Priyendra Deshwal, Stanford CS M.S., 2005
- Eric Hsu, Stanford CS M.S., 2004
- Scott Sanner, Stanford CS M.S., 2003
- Qing Zhou, Stanford CS M.S., 2001
- Yi Sun, Stanford CS M.S., 2000
- Daniel Mandell, Stanford B.S., 2000, also advised in a programming role past degree while in a graduate program at UCSF.
- Kevin Zalondek, MIT graduate CS student, advised as summer intern at Bell Labs
- Scott Hofmeister, MIT graduate CS student, advised as summer intern at Bell Labs

Visiting Researcher Host / Advisor:

- **Prof. Vasco Furtado, visiting professor 2005-2006.**

Current students (Computer Science unless otherwise noted)

Admitted to Candidacy

- Joshua Shinavier, 2013 w. J. Hendler
- Tim Lebo (Cognitive Science), 2014
- Octavio Perez (Multidisciplinary Studies), 2014, w. Michael Shur
- Rui Yan, 2013 (transferred from Nuclear and Mechanical Engineering)

Pre-candidacy

- Yue Robin Liu – began CS PhD 2013 after MS in ITWS
- Katherine Chastain - began PhD 2014
- John Sheehan – began 2014
- Zhicheng Liang (Jason) – began 2015 – transferred in Civil and Environmental Engineering and began at RPI in 2014.
- Sabbir Raschid – began 2016, transferred from ECSE and began at RPI in 2015.

Visiting Student Advisor

- Bharat Bojja, 2016. Summer High School Immersion Program
- Aaron Cai, 2016. Summer High School Immersion Program
- Edward Lee, 2015. Summer High School Student immersion program.
- Darren Mok, 2015. Summer High School Student immersion program.
- Henrique Santos 2014-2015 Science without Borders program
- Jeongmin Lee, 2012
- Chavon Thomas, 2012 (LSAMP program for underrepresented minorities)
- Sojett Blue, 2013 (LSAMP program for underrepresented minorities)
- Channing Vanderbilt, 2013 (LSAMP program for underrepresented minorities)
- Shanice Caldwell, 2013 (LSAMP program for underrepresented minorities)

World Wide Web Consortium (not incl. WG/IG member)

- Advisory Committee, Stanford Representative, 2001-2007.
- Web Ontology Working Group, Member, 11/01-7/04, 07-12. Author of 3 of 6 recommendation documents for OWL 1, and Author of 1 recommendation document for OWL 2.
- Semantic Web Best Practices and Deployment Working Group, Ontology Engineering Patterns Task Force CoChair. Produced 7 notes.
- Provenance Working Group, Member, Author of 1 recommendation document.

Referee, (Selected) Journal

Artificial Intelligence

Communications of the ACM

Computational Intelligence

IEEE Computer

IEEE Expert Systems / IEEE Intelligent Systems

IEEE Transactions on Knowledge and Data Engineering

IEEE Transactions on Pattern Analysis and Machine Intelligence

IEEE Transactions on Software Engineering

IEEE Transactions on Systems, Man, and Cybernetics
International Journal of Intelligent Systems
Journal of Web Semantics

Selected University Service – RPI (2008—pres)

2015- present Graduate Curriculum Committee
2014 –2015 Organizing committee Sinai Innovation Event.
2014- Search committee (chair), constellation business manager -hired Melissa Anderson.
2013 –present IDEA Leadership Committee (Co-Lead Health Analytics)
2013 – Search committee (co-chair), Head and/or full professor Cognitive Science – hired Nirenburg and reconfirmed Bringsjord as head.
2013 – Search committee (chair), financial analyst Tetherless World- hired Sharon Ray
2010-2012 – Search committee, Dean of Science – hired Leshin.
2010 – Search committee, Games and Simulation hiring committee for 3 tenure track professors. Hired Mei Si, Lee Sheldon, and Ben Chang
2010 – Search committee, Tetherless World Research Professor
2009 – Adhoc reviewer for VP of Research, Director of CCNI, and EMPAC Director
2008 – Tetherless World Constellation Chair
2008 – Winslow Renovation Oversight
2008-present – promotion and tenure committee - Numerous Tenure Committees