

SIGURD MELDAL

CEO

Mostly Sunny
 413 Claremont Way
 Menlo Park, CA 94025
 Phone: +1.650.209.0068
 Email: Sigurd.Meldal@mostly-sunny.com

EDUCATION

- **Dr. Scient. in Informatics** 1986
University of Oslo
- **NATO Advanced Science Institute on Concepts of Distributed Programming,** 1984
Marktoberdorf
- **Cand. Real. in Informatics** 1982
University of Oslo
- **Cand. Mag.,** with Minor in Mathematics and Statistics 1979
University of Oslo

EXPERIENCE

- **Commissioner, Engineering Accreditation Commission (EAC)** 2016 – present
ABET, Inc., Baltimore, MD
- **CEO, Mostly Sunny** 2012 – Present
Menlo Park, CA
- **Member, California Task Force on Cyber Security** 2014 – 2016
State of California
- **Director, Silicon Valley Big Data and Cybersecurity Center** 2013 – 2016
San José State University, San José, CA
- **Co-Director, NSF Center for Research in Ubiquitous Secure Technologies** 2005 – 2016
University of California, Berkeley, CA
- **Professor of Computer Engineering, Software Engineering and Computer Science** 2002 – 2020
Computer Engineering and Computer Science Departments, San José State University, San José, CA
- **Chair, Computer Engineering Department** 2002 – 2013
San José State University, San José, CA
- **Chair, Academic Senate** 2008 – 2009
San José State University, San José, CA
- **Chair, Computer Science Department** 2000 – 2002
California Polytechnic State University, San Luis Obispo, CA
- **Professor of Computer Engineering and Computer Science** 2000 – 2002
California Polytechnic State University, San Luis Obispo, CA
- **Associate Chair, Computer Science Department** 1999 – 2000
California Polytechnic State University, San Luis Obispo, CA
- **Associate Professor, Computer Science Department** 1997 – 2000
California Polytechnic State University, San Luis Obispo, CA
- **Professor (Consulting/Visiting), Electrical Engineering Department** 1989 – 1998
Stanford University, Palo Alto, CA
- **Professor, Department of Informatics** 1990 – 1998
University of Bergen, Bergen, Norway

- **Director, Computer Science Program** **1997**
College of Notre Dame, Belmont, CA
- **Department Chair, Department of Informatics** **1993 – 1995**
University of Bergen, Bergen, Norway
- **Associate Professor (Visiting), Electrical Engineering Department** **1989**
Stanford University, Palo Alto, CA
- **Førsteamanuensis, Department of Informatics** **1987 – 1989**
University of Bergen, Bergen, Norway
- **Fulbright Scholar** **1986 – 1987**
Stanford University, Palo Alto, CA
- **Universitetsstipendiat, Institute of Informatics** **1983 – 1986**
University of Oslo, Oslo, Norway
- **Researcher** **1982**
The Norwegian Computing Center, Oslo, Norway

LITIGATION CONSULTING

International Trade Commission; USPTO Patent Trial and Appeal Board; US District Court for the Central District of California; US District Court for the Northern District of California; US District Court for the Southern District of California; US District Court for the District of Columbia; US District Court for the District of Delaware; US District Court for the Northern District of Illinois; US District Court for the District of Nevada; US District Court for the District of New Jersey; US District Court for the Southern District of New York; US District Court for the Eastern District of Texas; US District Court for the Northern District of Texas; US District Court for the Eastern District of Virginia; Superior Court of the State of California, County of Alameda; Superior Court of the State of California, County of Santa Clara; US Bankruptcy Court for the Southern District of Florida, West Palm Beach Division

HONORS AND AWARDS

- **Certificate of Special Recognition from the U.S. House of Representatives** **2000**
Award given in bipartisan recognition of innovative work in software engineering degree design, in particular the integration of industry partners with academic studies.
- **Certificate of Recognition from the California State Assembly** **2000**
Award given in partisan recognition of innovative work in software engineering degree design, in particular the integration of industry partners with academic studies.
- **The Carl-Erik Fröberg Prize** **1987**
The Prize is given in odd numbered years to a young Nordic author of a distinguished paper published in the journal BIT.
- **Fulbright-Hays Fellowship** **1986**
The Fulbright Program is one of the most prestigious awards programs worldwide, with a highly competitive, merit-based grant for international educational exchange for scholars and scientists. Fifty-three Fulbright alumni have won Nobel Prizes; seventy-eight have won Pulitzer Prizes. More Nobel laureates are former Fulbright recipients than any other award program.

RESEARCH GRANTS, CONTRACTS, AND AWARDS

- **Hightail, Inc., Hightail QA Internship Program, \$452,805.** **2013 – 2014**

• Citrix Systems Silicon Valley , QA Internships, \$218,342.	2012 – 2014
• RingCube , QA Internships, \$940,000.	2007 – 2011
• National Science Foundation (NSF) , Science and Technology Center, Team for Research in Ubiquitous Secure Technology (TRUST), \$963,746.	2005 – 2016
• National Science Foundation (NSF) , Information Assurance Capacity Building Program (IACBP), \$356,000.	2006 – 2009
• Intel , Software Security Laboratory (co-PI), \$40,000.	2005
• Samsung Electronics , Software Engineering Internationalization, \$60,000.	2005
• GREEN Foundation , Fund for Excellence in Computer Software Engineering, \$500,000.	2000-2004
• CalPoly Plan , Retaining Females in Computer Science Education, \$15,000.	2000 – 2002
• CalPoly Plan , High Demand Courses - Computer Science, \$30,000.	2000 – 2002
• Private Donation , The Bonderson Advanced Software Design Studio, \$1,000,000.	2001
• Compaq , Computer Software Engineering Laboratory, \$35,000.	2001
• Compaq , Static Analysis Tools (requirements phase), \$20,000.	2000 – 2001
• Raytheon Systems , User Interface Frameworks for Command & Control, \$45,000.	1999 – 2000
• Raytheon Systems , JavaBeans, \$75,000.	2000
• Norges Forskningsråd (The Research Council of Norway) , Architecture Independence in Software Design and Development, \$175,000.	1997 – 2000
• US Department of Education , Supporting Effective Educator Development (SEED) Grant Program, \$2,500,000.	1999
• Metrowerks , Integrated Development Environment, \$157,398.	1998
• Norges Forskningsråd , Biocomputing, \$150,000.	1996 – 1998
• Norges Forskningsråd , Internationalization, \$75,000.	1994 – 1997
• US Department of Defense/Office of Naval Research , Rapid Construction of Software Prototypes (with Stanford University Program Analysis and Verification Group), senior personnel, \$545,367.	1989 – 1996
• US Advanced Research Projects Agency (ARPA) , Computer Aided Educational Technology (with Stanford University Program Analysis and Verification Group), senior personnel. Approx. \$600,000.	1989 – 1996
• European Strategic Program on Research in Information Technology (ESPRIT) , COMPASS-II (co-PI with Universität Bremen and other European partners), \$408,000.	1993 – 1996
• Norges Forskningsråd , Genetic Structures, \$150,000.	1994 – 1996
• Norges Forskningsråd , Architecture Abstraction, \$75,000.	1993 – 1995
• Norges Allmenvitenskapelige Forskningsråd , Parallellitet – algoritmer, pålitelighet og numeriske metoder, \$370,000.	1991 – 1993

DISSERTATIONS

- Sigurd Meldal. **"On Hierarchical Abstraction and Partial Correctness of Concurrent Structures."** Ph.D. dissertation, Institute of Informatics, University of Oslo, June 1986.
- Sigurd Meldal. **"CHAP — Et Forslag til Syntaks og Semantikk for Parallelle Prosesser."** Master's thesis, Institute of Informatics, University of Oslo, June 1982. (In Norwegian.)

BOOKS

- J. Homb, T.M. Jonassen, Sigurd Meldal, T. Rekdal, A. Schjalm. **"Overlevelsesguide for Realistaksjonens forlag, 1982. (In Norwegian.)"**

EDITED PROCEEDINGS

- **Proceedings of Norsk Informatikkonferanse (NIK '94).** Edited with Magne Haveraaen, Bjørn Jæger, Siri Bjorvand, Randi Karlsen, Stein Krogdahl, Arne Maus, and Syvert Nørsett. Tapir forlag, November 1994.
- **Proceedings of the 3rd Nordic Workshop on Program Correctness (NWPC).** Edited with Magne Haveraaen. University of Bergen, November 1992.

JOURNAL ARTICLES AND BOOK CHAPTERS

- Michal A. Walicki, Magne Haveraaen, and Sigurd Meldal. "**Computation Algebras.**" In *Mathematical Structures in Computer Science*, vol. 11, no. 5. Cambridge University Press, October 2001.
- David C. Luckham, James Vera, and Sigurd Meldal. "**Key Concepts in Architecture Definition Languages.**" In *Foundations of Component Based Systems*, pp. 23–46. Cambridge University Press, 2000.
- Sigurd Meldal, Gene L. Fisher, Daniel J. Stearns, and Peter C. Ölveczky. "**Software Prototyping.**" In *Wiley Encyclopedia of Electrical and Electronics Engineering*. Wiley Online Library, 1999.
- Sigurd Meldal and David C. Luckham. "**NSA's MISSI Reference Architecture – From Prose to Precise Specification.**" In *Requirements Targeting Software and Systems Engineering*, Lecture Notes in Computer Science (LNCS) 1526, pp. 293–329. Springer-Verlag, 1998.
- Sigurd Meldal and M. A. Walicki. "**Singular and Plural Non-deterministic Parameters.**" In *SIAM Journal of Computing*, vol. 26, no. 4. Society for Industrial and Applied Mathematics, August 1997.
- Michal Walicki and Sigurd Meldal. "**Algebraic Approaches to Non-Determinism – an Overview.**" In *ACM Computing Surveys*, vol. 29, no. 1, pp. 30–81. Association for Computing Machinery, March 1997.
- Sigurd Meldal and A. I. Vermesan. "**Verification Oriented Development of Knowledge Based Systems.**" In *New Review of Applied Expert Systems*, vol. 2, pp. 91–104. 1996.
- Michal Walicki and Sigurd Meldal. "**Multialgebras, Power Algebras and Complete Calculi of Identities and Inclusions.**" In *Recent Trends in Data Type Specification*, Lecture Notes in Computer Science (LNCS) 906, pp. 453–468. Springer-Verlag, March 1995.
- Michal Walicki and Sigurd Meldal. "**A Complete Calculus for the Multialgebraic and Functional Semantics of Non-determinism.**" In *ACM Transactions on Programming Languages and Systems (TOPLAS)*, vol. 17, no. 2, pp. 366–393. Association for Computing Machinery, March 1995.
- John Mitchell, Sigurd Meldal, and Neel Madhav. "**An Extension of Standard ML Modules with Subtyping and Inheritance.**" In *Information and Control*, vol. 71, pp. 95–130. 1991.
- Sigurd Meldal. "**A Complete Axiomatic Semantics of Spawning.**" In *Distributed Computing 5*, pp. 159–174. Springer-Verlag, May 1991.
- Sigurd Meldal. "**Fra Spesifikasjon til Virkelighet.**" In *DATA*, vol. 17, no. 4, pp. 42–45. 1987. (In Norwegian.)
- Sigurd Meldal. "**Partial Correctness of Exits from Concurrent Structures.**" In *BIT Numerical Mathematics*, vol. 26, iss. 3, pp. 295–302. BIT Computer Science and Numerical Mathematics, September 1986.
- Sigurd Meldal. "**An Axiomatic Semantics for Nested Concurrency.**" In *BIT Numerical Mathematics*, vol. 26, iss. 2, pp. 164–174. BIT Computer Science and Numerical Mathematics, April 1986.
- Sigurd Meldal and E. Mellbye-Larsen. "**Styring av Bus- of Lageraksess i en Multiprosessorarkitektur.**" In *Trip Report from the Joint Scandinavian Computer Conference (NordDATA '83)*. Den Norske Dataforening, June 1983. (In Norwegian.)

CONFERENCE PAPERS

- Sigurd Meldal. **"Some Thoughts on Cyber Risk and the Science(s) of Security."** Keynote address, IEEE International Symposium on Signals, Circuits and Systems, July 2013.
- Sigurd Meldal. **"Breadth, Depth...and Predictable Weather. Components of the Success of Silicon Valley."** Invited talk, Third International Exhibition and Forum of Industry and Innovations (INNOPROM), July 2011.
- Sigurd Meldal. **"Security – a Science?"** Invited Valedictorian address, IEEE 2nd International Advance Computing Conference (IACC), February 2010.
- Sigurd Meldal. **"It's a Dangerous World Out There – The Interplay of Security, Safety and Policy."** Keynote address, IEEE International Advance Computing Conference (IACC), March 2009.
- Sigurd Meldal, Kristen Gates, Russell Smith, and Xiao Su. **"Security, Safety and Privacy – Pervasive Themes for Engineering Education."** In *Proceedings of the International Conference on Engineering Education (ICEE)*, March 2008.
- Daniel Manson, Sigurd Meldal, Carol Sledge, Stephen M. Maurer, John C. Mitchell, Erich Spengler, Janos Sztipanovits, and Javier Torner. **"Learning Modules for Security, Privacy and Information Assurance in Undergraduate Engineering Education."** In *Proceedings of the 36th Annual Frontiers in Education Conference (FIE)*, October 2006.
- Jerry Gao, Yumei Wu, Lee Chang, and Sigurd Meldal. **"Measuring Component-Based Systems Using a Systematic Approach and Environment."** In *Proceedings of the Second IEEE International Symposium on Service-Oriented System Engineering (SOSE)*, October 2006.
- Daniel J. Stearns, C. S. Turner, and Sigurd Meldal. **"Ten Pounds in a Five-Pound Sack: Providing Software Engineering Students with Management Experience."** In *Proceedings of the International Conference on Engineering Education (ICEE)*, August 2001.
- Michal Walicki and Sigurd Meldal. **"Nondeterminism vs. Underspecification."** In *Proceedings of The Fifth World Multi-Conference on Systemics, Cybernetics and Informatics (SCI/ISAS)*, July 2001.
- Michal Walicki, Adis Hodzic, and Sigurd Meldal. **"Compositional Homomorphisms of Relational Structures."** In *Proceedings of the 13th International Symposium on Fundamentals of Computation Theory*, August 2001.
- David C. Luckham and Sigurd Meldal. **"Causal Event-Relations as a Basis for Analyzing Distributed Architectures."** In *Proceedings of the 8th International Colloquium on Computer Science with Applications*, August 1999.
- Peter C. Ölveczky and Sigurd Meldal. **"Specification and Prototyping of Network Protocols in Rewriting Logic."** In *Proceedings of Norsk Informatikkonferanse (NIK '98)*, November 1998.
- Sigurd Meldal. **"Reference Architectures and Conformance."** In *Proceedings of the International Workshop on Requirements Targeting Software and Systems Engineering (RTSE)*, April 1998.
- Valentinas Kriauciukas, Michal A. Walicki, and Sigurd Meldal. **"Nondeterministic Algebraic Specifications in a Relational Syntax."** In *Proceedings of the Nordic Workshop on Programming Theory (NWPT)*, November 1995.
- Anca Vermesan and Sigurd Meldal. **"An Algebraic Approach to Refinement of KBS Specifications."** In *Proceedings of the European Symposium on the Validation and Verification of Knowledge-Based Systems (EUROVAV)*, June 1995.
- Michal A. Walicki and Sigurd Meldal. **"Generated Models and the ω -Rule: The Nondeterministic Case."** In *Proceedings of the Sixth International Joint Conference on Theory and Practice of Software Development (TAPSOFT)*, May 1995.
- Aida Pluskeviciene, Regimantas Pluskevicius, Michal Walicki, and Sigurd Meldal. **"On Specialization of Derivations in Axiomatic Equality Theories."** In *Proceedings of the Symposium on Logical Foundations of Computer Science (LFCS)*, July 1994.

- Dinesh Katiyar, David Luckham, John Mitchell, and Sigurd Meldal. "**Polymorphism and Subtyping in Interfaces.**" In *Proceedings of the Workshop on Interface Definition Languages*, January 1994.
- P.O. Tvette and Sigurd Meldal. "**Causality Breakdown at ω .**" In *Proceedings of the Nordic Workshop on Programming Theory (NWPT)*, October 1994.
- Michal Walicki and Sigurd Meldal. "**Initiality + Nondeterminism => Junk.**" In *Proceedings of Norsk Informatikkonferanse (NIK '93)*, November 1993.
- Michal Walicki and Sigurd Meldal. "**Sets and Nondeterminism.**" In *Proceedings of the Tenth International Conference on Logic Programming (ICLP) Workshop on Logic Programming with Sets*, June 1993.
- Michal Walicki and Sigurd Meldal. "**Computations: A Deterministic Semantics of Nondeterminism.**" In *Proceedings of the 3rd Nordic Workshop on Program Correctness (NWPC)*, November 1992.
- John Mitchell, Dinesh Katiyar, David C. Luckham, Neel Madhav, Sigurd Meldal, and Sriram Sankar. "**Subtyping, Assignment and Cloning in a Concurrent Object-Oriented Language.**" In *Proceedings of the DARPA Software Technology Conference*, April 1992.
- Michal Walicki and Sigurd Meldal. "**Towards an Equational Theory of Nondeterminism.**" In *Proceedings of Norsk Informatikkonferanse (NIK '91)*, November 1991.
- Sigurd Meldal, Sriram Sankar, and James Vera. "**Exploiting Locality in Maintaining Potential Causality.**" In *Proceedings of the 10th ACM Symposium on the Principles of Distributed Computing (PODC)*, August 1991.
- Neel Madhav and Sigurd Meldal. "**An Object-Oriented Approach to Formal Specification of Reactive Systems.**" In *Proceedings of the 11th International Conference on Distributed Computing Systems (ICDCS)*, May 1991.
- John C. Mitchell, Neel Madhav, and Sigurd Meldal. "**An Extension of Standard ML Modules with Subtyping and Inheritance.**" In *Proceedings of the 18th ACM Symposium on the Principles of Programming Languages (POPL)*, January 1991.
- Sigurd Meldal. "**Supporting Architecture Mappings in Concurrent Systems Design.**" In *Proceedings of the 1990 Australian Software Engineering Conference (ASWEC '90)*, May 1990.
- David C. Luckham and Sigurd Meldal. "**Specifying and Observing Concurrent Programs.**" In *Proceedings of the 3rd Workshop on Large Grain Parallelism*, October 1989.
- Sigurd Meldal. "**An Abstract Axiomatization of Pointer Types.**" In *Proceedings of the 22nd Annual Hawaii International Conference on System Sciences (HICSS)*, January 1989.
- Sigurd Meldal, David C. Luckham, and Michael A. Haberler. "**Specifying Ada Tasking Using Patterns of Behavior.**" In *Proceedings of the 21st Annual Hawaii International Conference on System Sciences (HICSS)*, January 1988.
- Sigurd Meldal. "**Redundancy in Software Design.**" In *Proceedings of Norsk Informatikkonferanse (NIK '88)*, November 1988.
- Sigurd Meldal. "**Har Formelle Metoder Noen Plass i Programutvikling?**" In *Trip Report from the Joint Scandinavian Computer Conference (NordDATA '87)*, June 1987. (In Norwegian.)
- David C. Luckham, David P. Helmbold, Sigurd Meldal, D.L. Bryan, and Michael A. Haberler. "**Task Sequencing Language for Specifying Distributed Ada Systems.**" In *System Development and Ada, Proceedings of the CRAI Workshop on Software Factories and Ada*, 1987.

Dr. Sigurd Meldal

**Litigation testimony under oath has been offered
through declarations, reports, depositions or trial
2016-2021**

Dates provided for deposition and trial testimony

CITRIX SYSTEMS, INC. v. WORKSPOT, INC.

Case 18-cv-00588-LPS

April 19, 2018

US District Court for the District of Delaware

Provided deposition testimony (March 12, 15, 2021)

HULU, LLC v. SOUND VIEW INNOVATIONS, LLC

Inter Partes Review

IPR2018-01039

Patent Trial and Appeal Board

Provided deposition testimony (April 1, 2021)

MANAGEMENT ANALYTICS, INC. ET AL. v. QUINE INTELLECTUAL PROPERTY LAW GROUP
P.C. ET AL.

Case RG18900956

April 16, 2018

Superior Court of California, County of Alameda

Referred to arbitration

Provided arbitration hearing testimony (February 12, 2021)

COMMSCOPE, INC. v. ROSENBERGER TECHNOLOGY (KUNSHAN) CO. LTD

Case 19-cv-15962 (MCA)(LDW)

September 24, 2019

US District Court for the District of New Jersey

Provided deposition testimony (February 29, 2020)

X ONE, INC. v. UBER TECHNOLOGIES, INC.

Case 4:16-cv-06050-KAW

October 19, 2016

US District Court for the Northern District of California

Provided deposition testimony (September 18, 2019)

MMODAL SERVICES LTD v. NUANCE COMMUNICATIONS, INC.

Inter Partes Review

IPR2018-01431, IPR2018-01435

Patent Trial and Appeal Board

Provided deposition testimony (July 15, 2019, October 14, 2019)

SAMSUNG ELECTRONICS CO., LTD. ET AL. v. IMMERSION CORPORATION

Inter Partes Review
IPR2018-01499, IPR2018-01502
Patent Trial and Appeal Board

SOUND VIEW INNOVATIONS, LLC v. HULU, LLC

Case 2:17-cv-04146-JAK-PLA
June 2, 2017
US District Court for the Central District of California
Provided deposition testimony (October 5, 2018)

INTERNATIONAL BUSINESS MACHINES CORP. v. GROUPON, INC.

Inter Partes Review
IPR2017-01461
Patent Trial and Appeal Board
Provided deposition testimony (June 13, 2018)

BYTEMARK, INC. v. XEROX CORP., ACS TRANSPORT SOLUTIONS, INC., XEROX TRANSPORT SOLUTIONS, INC., CONDUENT INC., AND NEW JERSEY TRANSIT CORP.

1:17-cv-01803
March 10, 2017
US District Court for the Southern District of New York

SOUND VIEW INNOVATIONS, LLC v. FACEBOOK, INC.

2:17-cv-04275
June 8, 2017
US District Court for the Central District of California

BYTEMARK, INC. v. MASABI LTD.

2:16-cv-00543
May 20, 2016
US District Court for the Eastern District of Texas

MASABI, LTD. v. BYTEMARK, INC.

Inter Partes Review
IPR2017-01449
Patent Trial and Appeal Board
Provided deposition testimony (March 7, 2018, July 31, 2018)

SOUND VIEW INNOVATIONS, LLC v. FACEBOOK, INC.

1:16-cv-00116-RGA
February 29, 2016
US District Court for the District of Delaware
Provided deposition testimony (November 13, 2017)

INTELLECTUAL VENTURES I LLC v. CAPITAL ONE FINANCIAL CORPORATION, ET AL.

1:14-cv-00111-PWG
June 4, 2013
US District Court for the District of Maryland

IMMERSION CORP. v. APPLE INC. and AT&T MOBILITY LLC.

Certain Mobile Electronic Devices Incorporating Haptics (Including Smartphones and Smartwatches) and Components Thereof
ITC Inv. No. 337-TA-990
International Trade Commission
March 15, 2016
Provided deposition testimony (January 24, 2017)
Provided trial testimony (May 4, 2017)

APPLE INC. v. IMMERSION CORP.

Inter Partes Review
IPR2016-01884, IPR2016-01907
Patent Trial and Appeal Board
Provided deposition testimony (September 20-21, 2017)

YODLEE, INC. v. PLAID TECHNOLOGIES INC.

1:14-cv-01445-LPS-CJB
December 1, 2014
US District Court for the District of Delaware
Expert witness and reports
Provided deposition testimony (September 29, 30, 2016)

ANCORA TECHNOLOGIES, INC. v. APPLE, INC.

4:11-cv-06357-YGR
August 11, 2015
US District Court for the Northern District of California
Expert witness and reports
Provided deposition testimony (April 6, 2016)

TLFO LLC, TRANSUNION RISK AND ALTERNATIVE DATA SOLUTIONS, INC., v. THE BEST ONE, INC. and OLE POULSEN

13-20853 (PGH)
May 9, 2013
US Bankruptcy Court for the Southern District of Florida, West Palm Beach Division
Expert witness and reports
Provided deposition testimony (March 10, 2016)
Provided trial testimony (April 1, 2016)

HERRON v. BEST BUY STORES et. al.

12-cv-02103-GEB-JFM
June 2, 2014
U.S. District Court for the Eastern District of California

MOBILEMEDIA IDEAS, LLC v. APPLE INC.

1:10-cv-258-SLR-MPT
US District Court for the District of Delaware
Provided deposition testimony (April 23, 24, 25, 2012, November 29, 2012)
Provided trial testimony (December 4, 5, 6, 10, 2012)
Provided trial testimony (September 13, 19, 2016)