

Curriculum Vitae

David M. Hansen, Ph.D.

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Degrees

- Ph.D. Computer Science, 1995. Oregon Graduate Institute of Science and Technology, Portland, OR.
Professor David Maier, advisor.
- M.S. Computer Science, 1988. Washington State University, Pullman, WA.
- B.S. Computer Science, 1984. Oral Roberts University, Tulsa, OK.

Professional Experience

- 2005–Present. Associate Professor of Computer Science and Information Systems. George Fox University, Newberg, OR.
- 2006–Present. Consultant. Merchants Information Solutions, Phoenix, AZ.
- 2016–Present. Consultant. Access Solutions LLC, Portland, OR.
2016. Visiting Faculty Appointment. U.S. Department of Energy, Pacific Northwest National Laboratory, Richland, WA.
2015. Consultant. Inavero Inc., Portland, OR.
- 2014–2015. Major Field Test Computer Science (MFT CS) Development Committee. Educational Testing Service (ETS), Princeton, NJ.
2014. Consultant. 38Zeros, Portland, OR.
2013. Consultant. Global Technology Transfer Group, Portland, OR.
- 2011–2013. Consultant. The New Group, Portland, OR.
- 2010–2011. Sabbatical Appointment. Battelle Memorial Institute, Pacific Northwest National Laboratory, Richland, WA.
- 2008–2010. Staff Scientist. Oregon Health & Science University — Center for Coastal Margin Observation & Prediction (CMOP), Portland, OR.
- 2007–2008. Lead Architect. GoLife Mobile, Hillsboro, OR.
- 2005–2006. Consultant. Exelixis Plant Sciences, Portland, OR.
- 2003–2004, 1999–2002. Assistant Professor of Computer and Information Science. George Fox University, Newberg, OR.

2003–2004. Senior Research Associate. Oregon Health & Science University — OGI School of Science & Engineering, Portland, OR.

2002–2003. Director of Informatics. Exelixis Plant Sciences, Portland, OR.

2000–2004. Adjunct Lecturer. Oregon Health & Science University — OGI School of Science & Engineering, Portland, OR.

2001. Consultant. AirAdvice.com, Portland, OR.

2000–2001. Consultant. Battelle Memorial Institute, Pacific Northwest National Laboratory, Richland, WA.

2000. Consultant. Oregon Health & Science University, Portland, OR.

1999. Consultant. SingingFish.com, Seattle, WA.

1995–1999. Senior Research Scientist. Battelle Memorial Institute, Pacific Northwest National Laboratory, Richland, WA.

1995–1999. Adjunct Lecturer, School of Electrical Engineering and Computer Science, Washington State University, Pullman, WA.

1990–1995. Graduate Research Assistant. Oregon Graduate Institute of Science & Technology, Portland, OR.

1983–1990. Research Scientist. Battelle Memorial Institute, Pacific Northwest National Laboratory, Richland, WA.

Teaching Experience

George Fox University, Newberg, OR.

Courses Taught

CSIS 202 Introduction to Computer Science II

CSIS 304 Web-Based Programming

CSIS 310 Data Structures

CSIS 314 Client-Server Programming

CSIS 340 Database Systems

CSIS 360 Computer Architecture and Assembly Language

CSIS 370 Object-Oriented Programming

CSIS 420 Structures of Programming Languages

CSIS 430 Design and Analysis of Algorithms

CSIS 440 Artificial Intelligence

CSIS 460 Operating Systems

CSIS 480 Principles of Compiler Design

CSIS 485 Special Topics — Mobile Computing

ENGE 300 C-Programming

GEED 130 Freshman Seminar

MATH 150 World of Mathematics

HHPA 185 Special Topics — Marathon Training

Advising

Advisor, Richter Scholar Research Grant, Justin Howard, 2010.

Advisor, Richter Scholar Research Grant, Ryan Casey, 2009.

Advisor, Richter Scholar Research Grant, Brad Buchanan, 2008.

Advisor, Richter Scholar Research Grant, Brian Snider, 2006.

Advisor, Richter Scholar Research Grant, Joe Bruce, 2005.

Advisor, Richter Scholar Research Grant, Matt Hartzell, 2004.

Oregon Health & Science University — OGI School of Science & Engineering, Portland, OR.

Courses Taught

CSE 514 Introduction to Database Systems.

Washington State University, Pullman, WA.

Courses Taught

CptS 451 Introduction to Database Systems.

CptS 551 Database Systems.

Advising

Member, MS committee, Lijun Gu, 1998.

Member, MS committee, Janice Littlefield, 1997.

Certifications

2010 Scrum Master Certification

Honors

1991 Oregon Advanced Computing Institute (OACIS) Graduate Fellowship.

1982–1983 Oral Roberts University Music Performance Scholarship.

1980 Alpha Lambda Delta Honor Society.

Grants

2013 Amazon Web Services in Education Grant

2005 Northwest Academic Computing Consortium Grant

2004 Intel-OUS Engineering & Computer Science Grant Program

2004 NSF REU Supplement

2004 George Fox University Faculty Research Grant

2002 NSF REU Supplement

Memberships

Association for Computing Machinery (ACM), member of SIGMOD and SIGCSE.

IEEE Computer Society.

Consortium for Computing Sciences in Colleges (CCSC).

Association of Christians in the Mathematical Sciences (ACMS).

Professional activities

2011–Present Webmaster, Consortium for Computing Sciences in Colleges (CCSC) Northwest.

2016 Paper Reviewer, Consortium for Computing Sciences in Colleges (CCSC) Northwest. Portland, OR.

2015 Paper Reviewer, Consortium for Computing Sciences in Colleges (CCSC) Northwest. Seattle, WA.

2014 Paper Reviewer, Consortium for Computing Sciences in Colleges (CCSC) Northwest. Spokane, WA.

2013 Paper Reviewer, Consortium for Computing Sciences in Colleges (CCSC) Northwest. Forest Grove, OR.

2012 Paper Reviewer, Consortium for Computing Sciences in Colleges (CCSC) Northwest. Olympia, WA.

2011 Site-Chair, Consortium for Computing Sciences in Colleges (CCSC) Northwest. Richland, WA.

2011 Organizing Committee, 23rd International Conference on Scientific and Statistical Database Management. Portland, OR.

2010 Site-Chair, Paper Reviewer, Consortium for Computing Sciences in Colleges (CCSC) Northwest. Newberg, OR.

2009 Paper Reviewer, Consortium for Computing Sciences in Colleges (CCSC) Northwest. Tacoma, WA.

2008 Paper Reviewer, Consortium for Computing Sciences in Colleges (CCSC) Northwest. Ashland, OR.

2007 Speakers Chair and Paper Reviewer, Consortium for Computing Sciences in Colleges (CCSC) Northwest. Salem, OR.

2006 Paper Reviewer, Consortium for Computing Sciences in Colleges (CCSC) Northwest. Cheney, WA.

2005 Paper Reviewer, Consortium for Computing Sciences in Colleges (CCSC) Northwest. Bothell, WA.

2004 Paper Reviewer, Consortium for Computing Sciences in Colleges (CCSC) Northwest. Salem, OR.

2002 Paper Reviewer, Consortium for Computing Sciences in Colleges (CCSC) Northwest. Seattle, WA.

2001 Paper Reviewer, Consortium for Computing in Small Colleges (CCSC) Northwest. Tacoma, WA.

2000 Conference Co-Chair, Consortium for Computing in Small Colleges (CCSC) Northwest. Portland, OR.

2000 Proposal Reviewer, NSF Information Technology Research (ITR) program. Arlington, VA.

1998 Invited Participant, Metadiversity Symposium sponsored by National Federation of Abstracting & Information Services and the USGS. Natural Bridge, VA.

1997 Editor, Proceedings of the 9th International Conference on Scientific and Statistical Database Management, Olympia, WA.

1994 Reviewer, Information Systems. Editor, Yannis E. Ioannidis.

Presentations and Panels

- David M. Hansen,
Machine Learning via Artificial Neural Networks: An Introduction with Applications. Invited talk, Wheaton College, Chicago, IL, January 2015.
- David M. Hansen, Brent Wilson, Robert Bryant, Jenny Orr, Shereen Khoja, Gayathri Iyer.
Panel: MOOCS and their impact on CS education. Invited Panelist at the Pacific Northwest Conference of The Computing Sciences in Colleges (CCSC). October 2013.
- David M. Hansen, Charles Seaton, Alex Jaramillo, Paul Turner, Jeff Schilling, David Maier, J Freire, C Silva, and Antonio Baptista.
From Observatories to Collaboratories: The SATURN cyber-infrastructure. Poster presented at Coastal & Estuarine Research Federation 20th Biennial Conference, November 2009.
- Ryan Casey, David M. Hansen, Brent Wilson.
Energy Conservation with iPhone GPS. Poster presented at the Pacific Northwest Conference of the Consortium for Computing Sciences in Colleges (CCSC), October 2009.
- Chris Koch, David M. Hansen, Brent Strandy, and Brent Wilson.
Creating images for perception research. Poster presented at the 35th annual meeting of the Society for Computers in Psychology, November 2005.
- Matt Hartzell and David M. Hansen.
Assessing the proposed efficiency of scripting languages over traditional programming languages. Poster presented at the Pacific Northwest Conference of the Consortium for Computing Sciences in Colleges (CCSC), October 2004.
- David M. Hansen.
Enabling high-level queries of interdisciplinary scientific metadata. Poster presented at the Conference on Scientific and Technical Data Exchange, December 1997.
- David M. Hansen, Daniel R. Adams, and Deborah K. Gracio.
In the trenches with ObjectStore. Presented at the Workshop on Experiences Using Object Data Management in the Real World. Object-Oriented Programming Systems and Languages (OOPSLA), October 1997.

Publications

- David M. Hansen.
Introducing machine learning via baseball's hall of fame. *The Journal of Computing Sciences in Colleges*, 30(4):7–14, April 2015.
- David M. Hansen.
Paperless subjective programming assignment assessment: A first step. *The Journal of Computing Sciences in Colleges*, 29(1):116–122, October 2013.
- David M. Hansen, Joseph Bruce, David Harrison, and Zachary Hayes.
Give students a clue. *Proceedings of the 38th SIGCSE Technical Symposium on Computer Science Education*, March 2007.
- David M. Hansen.
A sin of omission: Database transactions. *The Journal of Computing Sciences in Colleges*, 21(1):225–230, October 2005.

- David M. Hansen, Daniel R. Adams, and Deborah K. Gracio.
 In the trenches with ObjectStore. In A.B. Chaudhri, editor, *Experiences Using Object Data Management in the Real World*, volume 5 of *Journal on Theory and Practice of Object Systems (TAPOS)*, pages 201–207. John Wiley & Sons, New York, 1999.
- Daniel R. Adams, David M. Hansen, Kevin G. Walker, and John D. Gash.
 Scientific data archive at the environmental molecular sciences laboratory. In *Proceedings of the Joint Conference on Mass Storage Systems*, College Park, Maryland, March 1998. NASA.
- David M. Hansen and Daniel R. Adams.
 A database approach to data archive management. In *Proceedings of the First IEEE Metadata Conference*, Silver Spring, Maryland, April 1996. <http://www.computer.org/conferen/meta96/hansen/paper.html>.
- David Marshall Hansen.
An Object-Oriented Heterogeneous Database Architecture. Ph.D. Dissertation, Oregon Graduate Institute of Science and Technology, Portland, OR, July 1995.
- R. Venkatesh, D. Hansen, D. Maier, and J.T. Stanley II.
 Applications of object database technology in thermodynamics and materials science. In P. Nash and B. Sundman, editors, *Proceedings of Applications of Thermodynamics in the Synthesis and Processing of Materials*, Rosemont, IL, October 1994. The Minerals Metals and Materials Society, TMS.
- David Maier and David M. Hansen.
 Bambi meets Godzilla: Object databases for scientific computing. In James C. French and Hans Hinterberger, editors, *Seventh International Working Conference on Scientific and Statistical Database Management*, pages 176–184, Charlottesville, VA, September 1994. IEEE Computer Society Press.
- David M. Hansen and David Maier.
 Using an object-oriented database to encapsulate heterogeneous scientific data sources. In Jay F. Nunamaker and Ralph H. Sprague, editors, *Proceedings of the Twenty-Seventh Annual Hawaii International Conference on System Sciences*, volume III, pages 408–417, Maui, Hawaii, January 1994. The University of Hawaii, IEEE Computer Society Press.
- David Maier, Judith Bayard Cushing, David M. Hansen, George D. Purvis III, Raymond A. Bair, D. Michael DeVaney, David F. Feller, and Mark A. Thompson.
 Object data models for shared molecular structures. In R. Lysakowski, editor, *First International Symposium on Computerized Chemical Data Standards: Databases, Data Interchange, and Information Systems*, Atlanta, GA, May 1993. ASTM.
- Judith Bayard Cushing, David Hansen, David Maier, and Calton Pu.
 Connecting scientific programs and data using object databases. *Bulletin of the Technical Committee on Data Engineering*, 16(1):9–13, March 1993.
- Judith Bayard Cushing, David Hansen, David Maier, and Calton Pu.
 Connecting scientific programs and data using object databases. In Wesley W. Chu, A. F. Cardenas, and Ricky K. Taira, editors, *Proceedings of the NSF Scientific Database Projects 1991-1993*, pages 34–39, Boston, MA, February 1993. AAAS, NSF.
- David Hansen, David Maier, James Stanley, and Jonathan Walpole.
 An object-oriented heterogeneous database for materials science. *Scientific Programming*, 1(2):115–131, Winter 1992.
- David M. Hansen.
 An automatic source-code generator generating subroutines for accessing an rdb database. In Joel M. Snyder, editor, *Proceedings of the Digital Equipment Computer Users Society*, pages 79–85, Anaheim, CA, December 1987. Digital Equipment Computer Users Society, DECUS.

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