LINDA M. OTT

Professor of Computer Science
Michigan Technological University
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Education:

Purdue University	PhD	Computer Science	1978
Purdue University	MS	Computer Science	1974
Purdue University	BS	Computer Science	1972

Professional Experience:

Department Chair	Department of Computer Science
July 2019 – July 2022	Michigan Technological University
Associate Dean for Special Initiatives	College of Sciences and Arts
March 2015 – May 2018	Michigan Technological University
Professor	Department of Computer Science
August 1999 –	Michigan Technological University
Fulbright Scholar	(On sabbatical leave from Michigan Tech)
January 2012 – April 2012	Siberian State Aerospace University
Visiting Scholar	
June 2011 – July 2011	Beijing Normal University of Zhuhai
Department Chair	Department of Computer Science
August 1996 – July 2010	Michigan Technological University
Special Assistant to the Provost	Provost's Office
September 1993 – August 1994	Michigan Technological University
Visiting Scholar	(On sabbatical leave from Michigan Tech)
September 1991 – June 1992	Department of Computer Science Colorado State University
Associate Professor of Computer Science	Dept. of Computer Science
September 1986 – August 1999	Michigan Technological University
Coordinator of Computer Science	Dept. of Mathematical & Computer Sciences
November 1984 – August 1987	Michigan Technological University
Consultant	Xerox Corporation
June 1982 – August 1982	Rochester, New York
Assistant Professor of Computer Science	Dept. of Mathematical & Computer Sciences
August 1978 – August 1986	Michigan Technological University

Honors:

- *NCWIT Extension Service Transformation Award Honorable Mention*, National Center for Women & Information Technology
  For excellence in recruiting and retaining women in computing-related fields.
- *ITiCSE Top 5 in 25 Award, ACM SIGCSE*
  Recognizing *Introductory programming: a systematic literaturereview*, Andrew Luxton-Reilly, Simon, Ibrahim Albluwi, Brett A. Becker, Michail Giannakos, Amruth N. Kumar, Linda Ott, James Paterson, Michael James Scott, Judy Sheard, Claudia Szabo, 2018 as one of the Top 5 working group papers in the first 25 years of ITiCSE.
- *Insight into Diversity* 100 Inspiring Women in STEM Award, 2015.

- Michigan Technological University Inaugural Diversity Award, 2014.
- ACM SIGSOFT's Retrospective Impact Paper Award in 2010 for The Program Dependence Graph in a Software Development Environment (with K. J. Ottenstein), *SDE 1, Proceedings of the First ACM SIGSOFT/SIGPLAN Symposium on Practical Software Development Environments*, April 23-25, 1984, Pittsburgh, PA.

Publications:

- Bettin, B., Ott, L. M. (2023) Pedagogical Prisms: Toward Domain Isomorphic Analogy Design for Relevance and Engagement in Computing Education, *Proceedings of the 2023 ACM Conference on Innovation and Technology in Computer Science Education.* (pp. 410-416), ACM. https://doi.org/10.1145/3587102.3588830
- B Bettin, L Ott, J. Hiebel (2023) More (Sema| Meta) phors: Additional Perspectives on Analogy Use from Concurrent Programming Students *Proceedings of the 2023 ACM Conference on Innovation and Technology in Computer Science Education.* (pp. 166-172) ACM. https://doi.org/10.1145/3587102.3588831
- B Bettin, L Ott, J. Hiebel (2022) Semaphore or Metaphor? Exploring Concurrent Students' Conceptions of and with Analogy *Proceedings of the 2022 ACM Conference on Innovation and Technology in Computer Science Education.* (pp. 200-206) ACM. https://doi.org/10.1145/3502718.3524796
- Bettin, B., Ott, L. M. (2021) Frozen in the Past: When it Comes to Analogy Fears, It's Time for Us to "Let it Go", *Proceedings of the 2021 ACM Conference on Innovation and Technology in Computer Science Education.* (pp. 359–365), ACM. https://doi.org/10.1145/3430665.3456381
- Dillon, L., Doyle, M., Ott, L. M., Powley, W., Johnson, A. (2020) Regional Programs to Increase Participation of Women and Underrepresented Minorities in Computing: Experiences, Partnerships, and Lessons Learned. *Proceedings of the ASEE Annual Conference 2020.* https://doi.org/10.18260/1-2--35028
- Szabo, C., Sheard, J., Luxton-Reilly, A., Simon, Becker, B. A., Ott, L. M. (2019) Fifteen years of introductory programming in schools: A global overview of K-12 initiatives. *ACM International Conference Proceeding Series*. https://api.elsevier.com/content/abstract/scopus_id/85076723370. 10.1145/3364510.3364513.
- Pollock, I., Alshaigy, B., Bradley, A., Krogstie, B. R., Kumar, V., Ott, L. M., Peters, A.-K., Riedesel, C., Wallace, C. R. (2019) 1.5 Degrees of Separation: Computer Science Education in the Age of the Anthropocene. *Proceedings of the Working Group Reports on Innovation and Technology in Computer Science Education* (pp. 1–25). New York, NY, USA: Association for Computing Machinery. https://doi.org/10.18260/1-2--35028
- Bettin, B., Ott, L. M. (2019). More Effective Contextualization of CS Education Research: A Pair-Programming Example. *Proceedings of the 2019 ACM Conference on Innovation and Technology in Computer Science Education* (pp. 182-188). ACM. https://dl.acm.org/doi/abs/10.1145/3304221.3319790
- Luxton-Reilly, A., Albluwi, I., Becker, B. A., Giannakos, M., Kumar, A. N., Ott, L. M., Paterson, J., Scott, M. J., Sheard, J., Szabo, C. (2018) Introductory programming: a systematic literature review. ACM. https://dl.acm.org/doi/abs/10.1145/3293881.3295779
- Ott, L. (2018). Combatting Stereotypes in Computing using Personality Type. *Proc. Of 2018 Frontiers in Education Conference* (FIE), San Jose, CA, October 2018. https://ieeexplore.ieee.org/abstract/document/8658710
- Andrew Luxton-Reilly, Simon, Ibrahim Albluwi, Brett A. Becker, Michail Giannakos, Amruth N. Kumar, Linda Ott, James Paterson, Michael James Scott, Judy Sheard, and Claudia Szabo. (2018). A Review of Introductory Programming Research 2003–2017.

ACM Conference on Innovation and Technology in Computer Science Education (ITiCSE 2018). Larnaca, Cyprus. DOI: https:/ /doi.org/10.1145/3293881.3295779.

- Ott, L., Bettin, B., Ureel, L. (2018) The Impact of Placement in Introductory Computer Science Courses on Student Persistence in a Computing Major. ACM Conference on Innovation and Technology in Computer Science Education (ITiCSE), Lanarca, Cyprus. https://dl.acm.org/doi/abs/10.1145/3197091.3197139
- G. Archer, B., Bettin, L. Bohmann, A. Carter, C. Cischke, L. Ott, L. Ureel. The Impact of Placement Strategies on the Success of Students in Introductory Computer Science, P*roc.2017 Frontiers in Education Conference*, October 2017. https://ieeexplore.ieee.org/abstract/document/8190526
- G. Archer, L. Bohmann, A. Carter, C. Cischke, L. Ott, L. Ureel. Understanding Similarities and Differences in Students across First-Year Computing Majors, P*roc.2016 Frontiers in Education Conference*, October 2016. https://ieeexplore.ieee.org/abstract/document/8190526
- L. M. Ott. Alumni as a Resource to Increase Student Retention in Early Computer Science Courses, *Proc.2015 Frontiers in Education Conference*, October 2015. https://ieeexplore.ieee.org/abstract/document/7344025
- L. M. Ott. Explorations in Computing: Could this be the Key to Retention?, *Proc. 2014 Frontiers in Education Conference*, October 2014. https://ieeexplore.ieee.org/abstract/document/7044198
- Shreya Kumar and L. M. Ott. Encouraging Talented High School Girls toward a Career in Computing through a Broader Understanding of the Field, *Proc. 121st ASEE Annual Conference*, June 2014.
- C. Brown, R. Pastel, M. Seigel, L. M. Ott, and C. Wallace. Adding Unit Test Experience to a Usability Centered Project Course, *Proc. ACM Special Interest Group on Computer Science Education (SIGCSE)*, March 2013. https://doi/abs/10.1145/2538862.2538964
- L. M. Ott, Object-Oriented Measurement of Software in J. Marciniak, editor, *Encyclopedia of Software Engineering*, Wiley, January 2002
- Linda Ott, Atte Kinula, Carolyn Seaman, Claes Wohlin. The Role of Empirical Studies in Process Improvement, *Empirical Software Engineering* 4(4): 381-386, December 1999.
- L. M. Ott and J. M. Bieman. Program Slices as an Abstraction for Cohesion Measurement, *Information and Software Technology*, 40, 1998, pp. 691-699.
- Dianne M. Marsh and Linda M. Ott. Distributed Processing: Requirements for an Object-Oriented Approach, *Proc. 30th Annual Hawaii International Conference on Systems Sciences*, January 1997.
- Peck Cho, Diana George, Linda Ott, William Predebon and Philip Sweany. New Faculty Orientation and Seminar Series: Emphasis on Teaching and Learning, *Proc. 1996 ASEE Annual Conference*, June 1996.
- Sue Beske-Diehl, Linda Ott, and Christine Anderson. Potential for Change: Going Beyond Recommendations in a Women's Climate Study, *Proc. 1995 Women in Engineering Program Advocate's Network National Conference*, June 4-6, Washington, D.C., pp. 189-194.
- L. M. Ott. The Early Days of Software Metrics: Looking Back After 20 Years, in A. Melton, editor, *Software Measurement: Understanding Software Engineering*, International Thomson Computer Press, 1995.
- J.M. Bieman, N. Fenton, D. A. Gustafson, A. Melton, and L. M. Ott. Fundamental Issues in Software Measurement, in A. Melton, editor, *Software Measurement: Understanding Software Engineering*, International Thomson Computer Press, 1995.
- Linda M. Ott, James M. Bieman, Byung-Kyoo Kang and Bindu Mehra. Developing Measures of Class Cohesion for Object-Oriented Software, *Proc. 7th Annual Oregon Workshop on Software Metrics*, June 1995.
- J.M. Bieman and L. M. Ott. Measuring Functional Cohesion, *IEEE Transactions on Software Engineering*, 20, 8 (August 1994) 644–657.

- L. M. Ott and J. J. Thuss. Slice Based Metrics for Estimating Cohesion, *Proc. IEEE-CS International Software Metrics Symposium*, Baltimore, May 21-22, 1993.
- L. M. Ott and J. M. Bieman. Effects of Software Changes on Module Cohesion, *Proc. Conference on Software Maintenance*, Orlando, November 9-13, 1992.
- L. M. Ott. Using Slice Profiles and Metrics during Software Maintenance, *Proc. 10th Annual Software Reliability Symposium*, Denver, June 25-26, 1992.
- L. M. Ott and J. J. Thuss. The Relationship between Slices and Module Cohesion, *Proc. 11th International Conference on Software Engineering*, Pittsburgh, May 15-18, 1989.
- T. G. Rauscher and L. M. Ott. *Software Development and Management for Microprocessor-based Systems*, Prentice-Hall, 1987.
- H. D. Longworth, L. M. Ottenstein [Ott], and M. R. Smith. The Relationship between Program Complexity and Slice Complexity during Debugging Tasks, *Proc. COMPSAC '86*, Chicago, 1986.
- K.J. Ottenstein and L. M. Ottenstein [Ott]. The Program Dependence Graph in a Software Development Environment, SDE 1, Proceedings of the First ACM SIGSOFT/SIGPLAN Symposium on Practical Software Development Environments, April 23-25, 1984.
- K.J. Ottenstein and L. M. Ottenstein [Ott]. High-level Debugging Assistance via Optimizing Compiler Technology, Extended abstract, Proceedings of the ACM SIGSOFT/SIGPLAN Software Engineering Symposium on High-level Debugging, Pacific Grove, CA, March 1983, published as *ACM SIGPLAN Notices 18*, 8 (August 1983) and *ACM Software Engineering Notes 8*, 4 (August 1983) 152-154.
- L. M. Ottenstein [Ott]. Predicting Software Development Errors Using Software Science Parameters, 1981 ACM Workshop/Symposium on Measurement and Evaluation of Software Quality, *Performance Evaluation Review* 10, 1, 157-167.
- L. M. Ottenstein [Ott]. Quantitative Estimates of Debugging Requirements, *IEEE Transactions on Software Engineering* SE-5, 9 (Sept. 1979) 504-514.
- L. M. Cornell [Ott] and K.J. Ottenstein. Further Investigations into a Software Science Relationship, *Proceedings of the Computer Measurement Group VII Conference*, Atlanta, Georgia, November 1976.

Grants:

- NCWIT AspireIT Summer 2020, Sponsored by: National Center for Women and Information Technology, Requested: $3,000, Awarded: $3,000, Matching (MTU): $0. (April 30, 2020 - April 30, 2021). (Principal Investigator: Leo Ureel)
- NCWIT-Aspire IT Round 10, Sponsored by: National Center for Women and Information Technology, Requested: $3,000, Awarded: $3,000, Matching (MTU): $0. (June 15, 2019 - October 14, 2019). (Principal Investigator: Leo Ureel)
- NCWIT Aspire IT Round 7, Sponsored by: National Center for Women and Information Technology, $3,300, (June 1, 2017 - September 30, 2018). (Principal Investigator: Leo Ureel)
- CS4All Workshop and Community of Practice for K12 Teachers, Google Inc. Fund of Tides Foundation, $35,000, 2017. (Co-Principal Investigators: Leo Ureel and Charles Wallace).
- CS4All Workshop and Community of Practice for K12 Teachers, Google Inc. Fund of Tides Foundation, $35,000, 2016. (Co-Principal Investigators: Leo Ureel and Charles Wallace).
- NCWIT Extension Services for Undergraduate Programs Mini-Grant, National Center for Women and Information Technology, $8,000, 2016. (Co-Principal Investigators: G. Archer, L. Bohmann, A. Carter, C. Cischke, L. Ureel).

- CS4All Workshop and Community of Practice for K12 Teachers, Google Inc $35,000, 2015. (Leo Ureel, Principal Investigator, Charles Wallace, Co-Principal Investigator).
- Women in Computer Science Summer Program for High School Girls, Jackson, $15,000 for each of 2013, 2014, 2015, 2016, 2017
- Women in Computer Science Summer Program for High School Girls, Ford, $10,000 for each of 2016, 2017
- 2014 Michigan Tech Pacesetters Partners, Ford, $5,000, 2014
- Pan-American Software Quality Institute, National Science Foundation, January 1, 2013 - December 31, 2013, Budget: $98,000. Co-Principal Investigator. (Charles Wallace, Principal Investigator).
- CPATH CDP: Integrating Sustainability into Undergraduate Computing Education, National Science Foundation, July 2008 - June 2010, Budget: $144,554. Co-Principal Investigator. (Yu Cai, Principal Investigator.)
- Course Development: Safety Critical Programming in C, Smiths Aerospace, $19,859. June 2007 (with Charles Wallace).
- Women in Computer Science Summer Program for High School Girls (with Chris Anderson), IBM, $15,000 each of 2005, 2006, 2007
- Graduate Teaching Fellows in Copper Country Schools, National Science Foundation, September 1999 - August 2002, Budget: $1,146,968. Co-Principal Investigator. (B. J. Baartmans, Principal Investigator).
- Improving Software Risk Management, Chicago Board of Exchange, March 1999 - November 1999, Budget: $20,419. (Co-Principal Investigator: Jim Northey).
- CSNET Services (RUI), awarded April 1985, NSF Computer Science Section, Budget: $8,000 (Principal investigators: D. Poplawski and K. Ottenstein), based on 4 research projects including The Program Dependence Graph in a Software Development Environment (with K. Ottenstein) (NSF DCR-8511439).
- RUI: Equipment for Computer Science Research, awarded May 1984, NSF Computer Science Section, Budget: $90,281 (Co-principal investigator with K. Ottenstein and D. Poplawski) (NSF DCR-8404909).
- The Evaluation of the PLATO LDEC Fortran 77, awarded June 1983, Control Data Corporation Equipment Grant, Approximate Value: $19,000 (with W. Francis).

Professional Presentations and Panels:

- The Impact of Placement Strategies on the Success of Students in Introductory Computer Science. 2017 Frontiers in Education Conference, October 2017 (See Publications).
- Understanding Similarities and Differences in Students across First-Year Computing Majors, 2016 IEEE Frontiers in Education Conference, October 2016 (See Publications).
- Working on how to solve the never ending problem of diversity, Panelists: J Winikus, G Archer, L Ott, 2016 IEEE Frontiers in Education Conference.
- The Role of Diversity in Computing from Education to the Workforce, Keynote Address, The First International Conference on the Internet, Cyber Security and Information Systems (ICICIS 2016), May 18-20, 2016, Gaborone, Botswana
- Explorations in Computing: Could this be the Key to Retention?, 2014 Frontiers in Education Conference, October 2014 (See Publications).
- Encouraging Talented High School Girls toward a Career in Computing through a Broader Understanding of the Field, (with Shreya Kumar), 121st ASEE Annual Conference, June 2014 (See Publications).
- Fulbrights Abroad in Computer Science, (Panel Discussion), SIGCSE 2013.
- Opening and Closing Remarks, 2009 Michigan Celebration of Women in Computing, April 3-4, 2009, Hickory Corners, MI.

- Invited Participant, NSF sponsored workshop on Empirical Research in Software Engineering, June 29-30, 1998, Greenbelt, MD.
- Measuring the Cohesion of Software, Invited Presentation, Series on Software Measures, Oregon Center for Advanced Technology Education, May 1995.
- Developing Measures of Class Cohesion for Object-Oriented Software (with James M. Bieman, Byung-Kyoo Kang and Bindu Mehra), 7th Annual Oregon Workshop on Software Metrics, June 1995 (See Publications).
- Sliced Based Metrics for Estimating Cohesion (with J. Thuss), IEEE-CS International Software Metrics Symposium, Baltimore, May 21-22, 1993 (See Publications).
- Effects of Software Changes on Module Cohesion (with J. Bieman), Conference on Software Maintenance 1992, November 9-12, 1992 (See Publications).
- Arguments for Developing and Accepting Multiple Paradigms for Software Maintenance, Panel on Paradigms for Maintenance, Conference on Software Maintenance 1992, November 9-12, 1992.
- Using Slice Profiles and Metrics during Software Maintenance, 10th Annual Software Reliability Symposium, Denver, June 25–26, 1992 (See Publications).
- History of, and Transitions in, Software Metrics Research and Usage, 1992 CSC Workshop on Software Metrics: Understanding Software Engineering, March 1992.
- Participant, Workshop on Directions on Software Engineering Education, 13th International Conference on Software Engineering, Austin, Texas, May 1991.
- Use of Serpent for Software Engineering Education at Michigan Technological University (with K. Dietz), Software Engineering Institute Affiliates Symposium 1990, Carnegie Mellon Institute, September 1990.
- The Relationship between Slices and Module Cohesion (with J.J. Thuss), 11th International Conference on Software Engineering, May 1989 (See Publications.)
- Using Slice Based Metrics for Measuring Module Cohesion (as L.M. Ottenstein with H. D. Longworth), 9th Minnowbrook Workshop on Software Performance Evaluation, Aug. 1986.
- Slices, Debugging and Complexity Metrics (as L.M. Ottenstein with H. D. Longworth and M. R. Smith), 8th Minnowbrook Workshop on Software Performance Evaluation, July 1985.
- High-level Debugging Assistance via Optimizing Compiler Technology (as L.M. Ottenstein with K. J. Ottenstein), ACM SIGSOFT/SIGPLAN Symposium on High-level Debugging, Pacific Grove, CA, March 1983 (See Publications).
- Debugging Information Obtained via Program Transformations (as L.M. Ottenstein with K.J. Ottenstein), Melecon ’83, Athens, Greece, May 24–26, 1983 (See Publications).
- Panelist, Software Engineering: Participant’s View 5th MinnowbrookWorkshop on Software Performance Evaluation, July 1982, Minnowbrook, NY.
- Predicting Software Development Errors Using Software Science Parameters, 1981 ACM Workshop/Symposium on Measurement and Evaluation of Software Quality (as L.M. Ottenstein), March 25–27, 1981, University of Maryland (See Publications).
- Panelist, The Status of Software Science in 1981, COMPSAC 81, November 1981, Chicago, IL.
- Panelist, Current and Future Tools for Debugging, ACM79, October 29–31, 1979, Detroit, MI.
- Further Investigations into a Software Science Relationship (as Linda M. Cornell with K. J. Ottenstein), Computer Measurement Group VII Conference, November 1976, Atlanta, Georgia.

Professional Activities:

- NCWIT Pacesetters Point Person, Michigan Technological University, 2013-2017
- Organizer, Michigan Regional NCWIT Aspirations in Computing Award, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021

- Program Committee Chair for Michigan Celebration of Women in Computing, 2007, 2011, 2013 and co-Chair 2015, 2017
- Conference Chair for 2009 Michigan Celebration of Women in Computing
- General Chair for 2004 International Software Metrics Symposium
- Program Co-Chair for 1997 International Software Metrics Symposium
- Editor, Q-Methods Report
- Vice-chair, IEEE Computer Society Technical Council on Software Engineering Committee on Quantitative Methods
- International Software Metrics Symposium Steering Committee, 1993–
- Publicity Chair and Program Committee for 1993 International Software Metrics Symposium

- Program Committee
    - 2006 International Symposium on Empirical Software Engineering
    - 1999, 2005 International Software Metrics Symposium
    - 1999 ICSE Workshop on Empirical Studies of Software Development and Evolution
    - Fifteenth Minnowbrook Workshop on Software Engineering
    - 1992 CSC Workshop on Software Metrics: Understanding Software Engineering,
    - 1981 ACM Sigmetrics Workshop/Symposium on Measurement and Evaluation of Software Quality
- Referee for
    - Journals: *IEEE Transactions on Software Engineering*, *Computer*, *ACM Transactions on Software Engineering and Methodology*, *Journal of Computer and Software Engineering*, *Software Engineering Journal*, *Information and Software Technology*, *Journal of Systems and Software*, *Software Practice and Experience*, *Empirical Software Engineering*
    - Conferences: ITiCSE, ASEE Annual Conference, Frontiers in Education, Grace Hopper Celebration of Women in Computing, International Test Conference, ISSRE, Software Reliability Symposium, Supercomputing, International Conferences on Software Engineering, COMPSAC,
    - Publishers: Pearson, Harper Collins College Publishers, West Publishing Co., CBS College Publishing, Benjamin Cummings Publishing Co., DC Heath, PWS-Kent Publishing Co.,
- Reviewer for National Science Foundation
- Consultant to U.S. Forest Service Grant to Michigan Tech. Forestry Center
- Consultant to NSF Grant (NSF MCS-8203487) (K.J. Ottenstein, PI)

PhD Dissertations Supervised:

Briana Bettin	*The Stained Glass of Knowledge: On Understanding Novice Mental Models of Computing*, August 2020

MS Thesis Supervised:

Timothy Ward	*Information Technology and Computer Science Education at St. Patrick's College in the Republic of Vanatu*, August 2016.
Herbert D. Longworth	*Slice Based Program Metrics*, January 1985
Jeffrey J. Thuss	*An Investigation into Slice Based Cohesion Metrics*, February 1988
Kevin Dietz	*A Comparison of User Interface Development Techniques*, July 1990

Dianne Marsh	*Parallel Programming: Requirements for an Object-Oriented Approach*, September 1992
Sakari Karstu	*An Examination of the Behavior of Slice-Based Cohesion Measures*, July 1994
Janne Leminen	*Slicing and Slice-Based Measures for the Assessment of Functional Cohesion of Z Operation Schemas*, May 1994
Bindu Mehra	*A Critique of Cohesion Measures in the Object-Oriented Paradigm*. March 1997
Teresa Hale	*Slice-Based Cohesion Measures*, February 1999
Jeff Winters	*A Measure of C++ Object-Oriented Parametric Const Correctness*, February 1997
Supriya Ghorpadkar	*Refinement of Slice-based Cohesion Measures*, August 2000 Christine Reid *Comparing Defect Detection Techniques*, May 2002
Matthew Scaer	*Assessing the Role of Experience in the Estimating of Risk: A Quantitative Approach*, May 2002

I have also served on numerous M.S. and Ph.D. committees for students in numerous disciplines.

Courses Taught

CS100/CS1000	Computer Science Orientation
CS110	Introduction to Programming (FORTRAN)
CS200	Introduction to Computer Science (PL/I, Pascal)
CS211	Programming Techniques (Pascal)
CS220	Introduction to Numerical Methods with FORTRAN
CS299	Elementary Programming Projects
CS310	Data Structures and Algorithms
CS320	Computers and Society (for CS Majors)
CS3000	Ethical and Social Aspects of Computing
CS341	Systems Software Project
CS400	Senior Projects
CS4000	Senior Seminar
CS410	File System Organization
CS420	Programming Languages
CS465/CS4711	Introduction to Software Engineering
CS4790/CS4791/CS4792	Senior Design Project
CS480	Discrete Simulation
CS499/CS4099	Directed Study in Computer Science
CS500/CS5990	Graduate Research in Computer Science
CS550/CS5711	Advanced Software Engineering
CS590/CS5090	Software Metrics Seminar
CS590	Object-oriented Programming Seminar

Other Instructional Activities:

- Undergraduate Advisor
- First-year Student Mentor
- Summer programs for junior high and high school students
    - Summer Institute for Women in Computer Science
    - Women in Engineering
    - Minorities in Engineering

    - American Indian Science and Mathematics Faculty Advisor
- NOW student chapter
- ACM Student Chapter
- WICS (Women in Computer Science) student organization
- Faculty Sponsor, ACM Programming Contest Team, 1989–1992

Sampling of Department and University Committees:

- CS Faculty Search Committees
- CS and College Promotion, Tenure and Reappointment Committee
- CS Undergraduate Committee
- CS Graduate Committee
- University Senator and member of Senate Curricular Policy Committee and Elections Committee and Commission to Evaluate the University Administration
- University General Education Committee
- University Faculty Development Committee