Michael D. Scott

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Education

M.S. Computer Science, Rensselaer Polytechnic Institute (Rensselaer at Hartford), May 1998.
B.S. Industrial Engineering, *with distinction*, Stanford University, June 1990.

Professional Experience

2000 - present:	Lecturer, Computer Science Department, University of Texas at Austin.
2013:	Promotion to Distinguished Senior Lecturer approved
2007:	Promotion to Senior Lecturer approved
2005 spring:	Research Scientist, University of Texas at Austin.
2003 - 2006:	Consultant, Advanced Placement Strategies.
2002 - 2016:	Consultant, Advanced Placement Computer Science, The College Board.
2002 - 2012:	Co-director, Texas University Interscholastic League (UIL) Academic Competition for High Schools, Computer Science Contest.
2001 - 2004:	Consultant, Advanced Placement Computer Science, ETS.
1998 - 2000:	Computer Science Classroom Teacher, Round Rock High School.
1998:	Software Support, Motorola, BAT-1, Austin TX. (6/1998 – 9/1998)
1995 - 1998:	Instructor, Submarine Communications and Operations Division, Unites States Navy Submarine School, Groton, CT.
1992 - 1993:	Instructor, Engineering Watch Officer Training, US Navy, Knolls Atomic Power Laboratory – Kesselring, West Milton, New York, MARF Prototype.
1990 - 1998:	United States Navy, Nuclear Submarine Officer.
1988 - 1990:	Undergraduate Teaching Assistant, Computer Science Department, Stanford University.

Current Research Interests

Computer science education, introductory computer programming, and computer science at the high school level.

Awards and Honors

1. 2013: Selected as Inaugural Provost's Teaching Fellow.
2. 2012: UT President's Associates Teaching Excellence Award.
3. 2012: UT Dads' Association Centennial Teaching Fellowship.
4. 2011: The University of Texas System Regents' Outstanding Teaching Award.
5. 2009: College of Natural Science Teaching Excellence Award.
6. 2008: College of Natural Sciences Sustained Outreach Award.
7. 2006: College of Natural Sciences Sustained Outreach Award.
8. 2005: College of Natural Sciences Advisory Council Teaching Excellence Award.
9. 2005: University of Texas, College of Natural Sciences Council Faculty Service Award.
10. 1997: Navy Commendation Medal.
11. 1993, 1994, 1995: Navy Achievement Medals.
12. 1990: Graduated with distinction (top 15% GPA), Stanford University.
13. 1990: Phi Beta Kappa, Beta of California.
14. 1989: Tau Beta Pi, engineering honor society.
15. 1987: President's Award for Academic Excellence in the Freshman Year. (top 3% of freshmen class)

Group Awards:

16. 2006: College of Natural Sciences Innovative Outreach Award. Awarded to the First Bytes Outreach Program.
17. 2005: Women in Natural Sciences Everybody WINS awards. Awarded to the First Bytes Program Outreach.

Teaching and Course / Instructor Evaluation Scores:

Course		Ratings (out of 5.0)	
Term (sections)	**Enrollment**	**Instructor**	**Course**
CS378 / CS371M Mobile Computing			
Spring 2017	50	4.9	4.5
Spring 2016	60	4.7	4.4
Spring 2015	59	4.8	4.6
Fall 2014	58	4.9	4.7
Spring 2014	43	5.0	4.8
Fall 2013 (2)	79	4.9	4.9
Fall 2012	49	5.0	4.9
Spring 2012	37	4.7	4.4
CS314 Data Structures			
Spring 2024 (2)	231	4.7	4.5
Fall 2023 (3)	328	4.7	4.6
Spring 2023 (2)	213	4.7	4.5
Fall 2022 (3)	276	4.7	4.5
Spring 2022 (2)	218	4.7	4.5
Fall 2021 (3)	282	4.5	4.3
Spring 2021 (2)	210	4.5	4.3
Fall 2020 (2)	238	4.4	4.3
Spring 2020 (2)	194	4.7	4.5
Fall 2019 (2)	289	4.7	4.6
Spring 2019 (2)	200	4.5	4.3
Fall 2018 (2)	262	4.6	4.4
Spring 2018 (2)	210	4.6	4.5
Fall 2017	155	4.6	4.4
Spring 2017 (2)	208	4.7	4.5
Fall 2017 (2)	126	4.7	4.4
Spring 2016 (2)	187	4.7	4.5
Summer 2015	18	4.8	4.6
Spring 2015 (2)	166	4.9	4.8
Summer 2014	62	4.8	4.6
Spring 2014 (2)	282	4.7	4.5
Summer 2013	96	4.6	4.4
Spring 2013 (2)	352	4.6	4.4
Fall 2012	117	4.6	4.4
Summer 2012	65	4.8	4.6
Fall 2011 (2)	104	4.7	4.4
CS307 Foundations of Computer Science			
Summer 2011	61	4.5	4.2
Spring 2011 (2)	177	4.7	4.4
Fall 2010 (2)	134	4.7	4.6
Summer 2010	42	4.9	4.6
Spring 2010 (2)	128	4.7	4.5
Fall 2009 (2)	140	4.7	4.4
Summer 2009	35	4.9	4.6
Spring 2009 (2)	154	4.6	4.4
Fall 2008 (2)	144	4.7	4.4
Summer 2008	36	4.7	4.4
Spring 2008 (2)	132	4.7	4.4
Fall 2007 (2)	126	4.6	4.3
Summer 2007	28	4.4	4.2
Spring 2007 (2)	116	4.7	4.4
Fall 2006 (2)	125	4.5	4.3
Summer 2006	22	4.6	4.4
Spring 2006 (2)	98	4.6	4.2
Fall 2005 (2)	94	4.7	4.2
Summer 2005	29	4.8	4.4
Spring 2005 (2)	98	4.7	4.4
Fall 2004 (2)	126	4.4	4.0
Summer 2004	19	4.4	4.2
Spring 2004 (2)	112	4.5	4.2
Fall 2003 (3)	136	4.5	4.1
Summer 2003	27	4.4	4.3
Spring 2003 (3)	186	4.2	3.9
Fall 2002 (2)	251	4.2	3.9
Fall 2002 (UTX)	10	4.3	3.9
Summer 2002	42	4.0	3.9
Spring 2002 (3)	215	4.5	4.0
Fall 2001 (3)	272	4.5	4.0
Fall 2001 (UTX)	18	4.6	3.9
CS312 Introduction to Programming			
Spring 2022	101	4.5	4.4
Fall 2020 (2)	223	4.7	4.6
Fall 2019 (2)	200	4.8	4.6
Summer 2019	30	4.8	4.7
Fall 2018 (2)	203	4.8	4.6
Summer 2018	37	4.7	4.4
Spring 2018	42	4.6	4.3
Fall 2017 (2)	204	4.8	4.7
Fall 2016	133	4.9	4.7
Fall 2015 (3)	210	4.8	4.6
Fall 2013	164	4.7	4.5
Spring 2013	102	4.8	4.8
CS305J Introduction to Computing			
Spring 2010	78	4.7	4.5
Fall 2008	128	4.7	4.5
Fall 2007	103	4.5	4.3
Fall 2006	94	4.5	4.2
Fall 2004	96	4.4	4.0
Fall 2003	105	3.9	3.7
CS324E Elements of Graphics and Visualization			
Fall 2012	44	4.6	4.0
Spring 2012	57	4.6	4.4
Spring 2011	43	4.6	4.3
Fall 2009	38	4.7	4.3
CS320N / CS329E Visual Programming			
Spring 2009	29	4.1	3.7
Spring 2008	26	4.5	3.9
Spring 2007	20	4.7	4.3
Spring 2006	20	4.6	4.1
Fall 2005	39	4.5	3.9

CS303E Elements of Computers and Programming			
Summer 2023	62	4.8	4.5
Summer 2022	63	4.3	4.1
Summer 2021	79	4.6	4.3
Summer 2020	91	4.6	4.3
Spring 2012	103	4.7	4.4
Spring 2001	473	4.4	4.0
Fall 2000	435	4.3	4.0
Fall 2000 (UTX)	31	4.2	3.9

UGS302 History and Impact of Electronic Entertainment			
Fall 2011	18	4.8	4.3
Fall 2010	18	4.5	4.3

CS109 Python Programming			
Spring 2024	28	4.4	4.1
Spring 2023	41	4.7	4.7

CS329e Elements of Android App Development			
Summery 2018	12	4.8	4.1

Professional Societies

Former member of: Association of Computing Machinery (ACM), Computer Science Teachers' Association (CSTA), Texas Computer Education Association (TCEA).

Service

National

1. Computer Science Teachers Association, Advisory Council. June 2010 - October 2016.
2. Contributor, College Board AP Computer Science Exam, Fall 2005, January 2006, June 2006, April 2008, October 2010, December 2011, May 2013, May 2015.
3. Consultant, Advanced Placement (AP) Computer Science exam grading conducted by Educational Testing Services, June 2001, 2003, 2004.
4. Participant, College Board Advanced Placement Computer Science A and AB Exams College Comparability Study, Multiple Choice and Free Response Questions, Fall 2003.
5. Participant, College Board Advanced Placement Computer Science AB Exam (CS2) Pretest Study, Fall 2002, Spring 2005, Fall 2005, Spring 2006, Fall 2006, Fall 2007. A Exam (CS1) Pretest Study, Fall 2004, Fall 2005, Fall 2006, Fall 2007.
6. Participant, College Board University Faculty Colloquium on the Advanced Placement Computer Science Course, Chicago, IL, October 24 - 26, 2008.
7. Contributor, Computer Science GRE Subject Exam, Spring 2005, Fall 2005, Spring 2006, Fall 2007.
8. Reviewer Advanced Placement Computer Science Exam, March 2009.

State

1. Co-director, Texas University Interscholastic League (UIL) Academic Competition for High Schools, Computer Science Contest. 2002 to 2012.
2. Committee Member, Additions and Changes to the Texas University Interscholastic League (UIL) Academic Competition for High Schools, Computer Science Contest Advisory Committee, June 2005 and August 2009.
3. Chairman, Additions and Changes to the Texas University Interscholastic League (UIL) Academic Competition for High Schools, Computer Science Contest Advisory Committee, August 17, 2007.
4. Member, Computer Science 8-12 Standard Setting for the Texas Examinations of Educator Standards (TExES) Program, October 25, 2004.
5. Question write for the Computer Science 8-12, Texas Examinations of Educator Standards (TExES) Certification Exam. Fall 2014, Fall 2015.
6. Committee Member, The Transition from C++ to Java for the Texas University Interscholastic League (UIL) Academic Competition for High Schools, Computer Science Contest Advisory Committee, August 17 – 18, 2002.

University

1. Honor Code Revision Committee, 2022
2. Quantitative Reasoning Flag Faculty Committee, 2017 - 2020
3. University Teaching Awards Committee, 2015 - 2016, Spring 2017
4. Academy of Distinguished Teachers Selection Committee, 2012, 2013
5. "Game Making with Scratch", ongoing presentation at Explore UT, March 5, 2011, March 3, 2012, March 2, 2013, March 7, 2015, March 5, 2016.
6. Contest Judge, UIL Computer Science State Contest, 2001 – 2012.
7. UGS 302, History and Impact of Electronic Entertainment. Interdisciplinary freshmen signature course for the School of Undergraduate Studies, Fall 2010, 2011.
8. University Admissions and Registration Committee, 2007 - 2009.
9. University Steering Committee on Course and Learning Management Software, 2011.
10. Reading Round-Up. Book discussion with incoming freshmen. August 24, 2010 and August 23, 2011.
11. "Computer Programming with Alice", ongoing presentation at Explore UT, March 1, 2008 and March 6, 2010.
12. "Colors and Computers", one-hour presentation to Priscilla Pond Flawn Child and Family Laboratory School, June 11, 2008 and June 22, 2009.
13. Developed teaching materials for high school Advanced Placement computer science courses, Spring 2005. Set of materials for use by high school teachers to assist in teaching a second course in computer programming.
14. "Learn to Program a Computer by Taking Over the World", presentation at Explore UT, March 2002, 2004.
15. Fall Moove-In Volunteer, August 2001.

College

1. Polymathic Scholars Faculty Committee, 2014 - 2019.
2. College of Natural Science Awards Committee, 2012 - present.
3. College of Natural Science Committee on Non-Tenure Track Faculty, 2012 - 2014.
4. College of Natural Science Working Group for Non-Tenure Track Faculty Issues, 2012.
5. Texas Interdisciplinary Plan (TIP), application reviews, April 2006 - 2013.
6. "Encoding and Compression", one-hour presentation at the Juniors Honors Colloquium. July 25, 2008, July 23, 2009, July 23, 2010, July 22, 2011, July 19, 2013, July 25, 2014, July 24, 2015.
7. Presentation and Discussion on Teaching to CS380T, Supervised Teaching in Science, April 2, 2012.

8. College of Natural Science, ad hoc committee on Computer Science in K – 12 Education, 2002 – 2003.
9. "Succeeding in Computer Science as an Undergraduate," College of Natural Science Freshmen Interest Group, October 2002.
10. "Being a Teacher / Being a Student: Differences in High School and College," College of Natural Sciences Dean's Scholars Lunch, October 2000.

Departmental

1. Bill Young Promotion Committee, with Dr. Hunt, Summer 2023.
2. Computer Science Accelerated Transfer Program for first-year students, 2020 - present
3. Angie Beasly Three Year Review Committee, with Dr. Norman, Spring 2021.
4. Contact for Credit by Exam for CS312 (2013 - present) and CS303e (2020 - present). Advise on course credit for IB and AP Exams. Create, maintain, and grade credit by exams administered to students.
5. Computer Science Department UIL Invitational Contest. Written and Programming contest for Texas High School students. Event Coordinator and Contest Director. February 6, 2010, February 13, 2011, February 11, 2012, February 9, 2013, February 1, 2014.
6. UTCS Turing Scholars Undergraduate Honors Programs Committee, 2001 – present.
7. CS Undergraduate Studies Committee, 2007 - 2010.
8. UTCS Undergraduate Admissions Committee, 2002 – 2005.
9. First Bytes / CS4HS camp for High School Computer Science Teachers. Faculty director, presenter, and coordinator. 2.5-day workshop. July 2008, July 2009, July 2010.
10. First Bytes camp for High School Computer Science Teachers. Departmental participant and presentation on *CS Unplugged* materials. June 8 - June 10, 2007.
11. First Bytes camp for High School Computer Science Teachers. Departmental participant and presenter for lectures on using the *Alice Programming Language* and *Making Interesting Computer Science Programming Assignments*. July 11 – July 14, 2006. Session on *Introduction to Dynamic Programming*, June 25, 2015.
12. First Bytes High School Girls Summer Camp Committee, 2002 – 2007.
13. UTCS Elements Program committee, 2009 - 2012.
14. "Learning to Program with Alice and LabVIEW," 10 hours of lab instruction to First Bytes Summer Camp, July 2006. June 2007, July 2008, June 2009, and June 2010.
15. "Learning to Program with LabVIEW and Alice," 12 hours of lab instruction to First Bytes Summer Camp, July 25 – July 29, 2005.
16. "Learning to Program with LabVIEW," 12 hours of lab instruction to First Bytes Summer Camp, July 26 – July 30, 2004.
17. "Learning to Program with MatLab," 20 hours of lab instruction to First Bytes Summer Camp, June 2003.

18. First Bytes Computer Science Camp for High School Women presentation, *Mobile Computing*, June 16, 2014.
19. Co-creator of the Undergraduate Section Leader Program. Coordinator for undergraduate teaching assistants in introductory Computer Science classes. Fall 2001 – Spring 2004, 2015 - present. Program employs undergraduates as teaching assistants to lower the student to TA ratio.
20. Departmental contact and grader for Center for Teaching and Learning credit by exam, 2010 - present.
21. Created CS Assessment to assist advisors in placement of incoming students to introductory programming courses. 2012 - 2013.
22. Provided testimony to the Texas State Board of Education on counting high school Computer Science classes as a Science and Mathematics credit. July 6, 2006, September 14, 2006, July 18, 2007, and July 21, 2011.
23. UTCS Faculty Evaluation Committee, 2004 – 2005, 2010 - 2011.
24. "Going Digital. The Science behind Digital Images", presentation at the departmental Breakfast Bytes outreach program for middle school and high school students. January 23, 2010 and March 24 2012.
25. "CS Unplugged", presentation at the departmental Breakfast Bytes outreach program to middle and high school students, April 18, 2009.
26. "Programming with Alice", presentation at the departmental Breakfast Bytes outreach program to middle and high school students, September 25, 2008.
27. "Developing Android Applications", First Bytes / CS4HS camp for High School CS Teachers, July 10, 2012.
28. Chairman's ad hoc Committee for Space, Spring 2010.
29. Chairman's ad hoc Committee for Work Load Credit Policy, Fall 2006.
30. Chairman's ad hoc Committee for Women and Minorities in Computer Science, 2003 – 2004.
31. Departmental representative at the Carnegie Mellon University Computer Science for High School Teachers conference, July 22 - 24, 2006.
32. Met with prospective students as part of the CS Ambassadors program. (http://www.cs.utexas.edu/undergraduate-program/admissions/schedule-visit) Met with approximately 150 students and parents for 30-minute discussion of UTCS. 2006 - 2013.
33. Small group talks with students:
    a. "Meet the Prof" presentations to CS Pods, September 17, 2014 and October 6, 2015, fall 2016. 3 presentations each day.
    b. UTCS Empowering Leadership Alliance, March 2013
    c. UT Engineering Tau Beta Pi Chapter, March 2013
    d. Women in Computer Science, 2010, 2012.
34. Mobile Computing Projects - Student Showcase, GOTO GDC (Gates Computer Science Complex Grand Opening), March 6, 2013.

35. Tour guide for St. Michaels Academy Tech Club visit to the department, February 22, 2007.
36. Participated in study on different approaches for teaching recursion with Professor Calvin Lin and Joe Tessler (Turing Scholar student). CS314 summer 2013.
37. Faculty Liaison, student chapter Association for Computing Machinery, 2001 – 2002.

Community

1. "Bits and Bytes: Game Programming with Scratch", Half day workshop for local Girl Scout troops. April 3, 2010, May 1, 2010.
2. Game Making with Alice. Half-day workshop at the Austin Area Girl Scouts *Groovy Games* camp. August 13, 2009.
3. Stony Point High School STEM Academy Advisory Board, Fall 2012.
4. "Discover Engineering" presentations & projects, Fern Bluff Elementary, Round Rock, TX. May 19, May 21, 2010.
5. Science Fair Judge, Fern Bluff Elementary, 2008 - 2011.
6. Member, Georgetown High School Computer Science Advisory Committee, December 2004, March 2008.
7. Round Rock Dolphins Swim Team Webmaster, 2003 - 2004.
8. "Computer Science at the College Level," Round Rock High School Computer Science classes, Round Rock, TX, March 2002.

Curriculum Development

Developed or made significant revisions to the following courses:

1. CS109 Computing Programming: Python, Spring 2023, Developed new version of 1 credit introduction to the Python Programming Language.
2. CS378 (now CS371M) Mobile Computing - Android App Development, Spring 2012. (new class)
3. Taught first offering of CS314, Data Structures (combination of CS307 and CS315), Fall 2011. (revision)
4. UGS 302, History and Impact of Electronic Entertainment. Interdisciplinary freshmen signature course for the School of Undergraduate Studies, Fall 2010. (new class)
5. CS324e, Elements of Graphics and Visualization. Fall 2009. (revision)
6. CS329e (now numbered CS320N), Elements of Visual Programming, Summer 2005. (new class)
7. CS305J (now numbered CS312) Introduction to Programming. Previously majors and non-majors took the same programming course, CS303e. Developed a more rigorous course for students wishing to major in computer science. (major revision)
8. CS307, Foundations of Computer Science, Summer 2001. (major revision)

Grants

Previous Funding

1. (as Co-PI) Google Corporation, "CS4HS / First Bytes Workshop for High School Computer Science Teachers," $18,000, 2010.
2. (as Co-PI) Google Corporation, "CS4HS / First Bytes Workshop for High School Computer Science Teachers," $24,000, 2009.
3. (as Co-PI) Texas Workforce Commission, "First Bytes Summer Camp / Recruitment of Female Computer Science Students and Workshops for High School Computer Science Teachers," $24,000, 2008 - 2009.
4. (as Co-PI) Google Corporation, "CS4HS / First Bytes Workshop for High School Computer Science Teachers," $25,000, 2008.

Publications

Surveys, Editorials, and Reviews

1. *Teaching-Oriented Faculty at Research Universities*, Steve Wolfman, Owen Astrachan, Mike Clancy, Kurt Eiselt, Jeffrey Forbes, Diana Franklin, David Kay, Mike Scott, and Kevin Wayne, Communications of the ACM Vol. 54 No. 11, November, 2011.

Chapters in Books

2. *A College Data Structures Course Syllabus - CS307,* AP Computer Science Java Syllabi Collection, The College Board, 2005.

Articles in Conference Proceedings

3. *The Limitations of Current Object Oriented Dynamic Modeling Techniques*, Proceedings of the 14th Annual Rensselaer at Hartford Computer Science Conference, April 25th, 1998.

Lectures, Workshops, and Presentations

Invited Lectures

1. Experiential Learning. Provost Faculty Fellows Program, April 7, 2014.
2. UTCS Undergraduate Curriculum. Presentation to the Computer Science Teachers Association, central Texas Group, December 8, 2012.
3. "Going Digital. The Science behind Digital Images", presentation at Austin ISD Liberal Arts and Science Academy. October 20, 2011.
4. "Computer Science and UIL: Specifics about the contest and an overview of the field of Computer Science," The UIL Capital Conference, July 2006 and July 11, 2008.

5. "Riding the Roller Coaster. Reflections on Ten Years of Computer Science Education.", Texas Computer Education Association Annual Convention, High School CS Teachers SIG, Austin Texas, February 6, 2008.
6. "Creating and Using Sets and Maps in Java", invited technical lecture at the Texas Lutheran University Advanced Placement Computer Science Summer Workshop, July 27, 2006.
7. "The Transition from C++ to Java in Advanced Placement Computer Science," Texas Computer Education Association Annual Convention, Austin Texas, February 2003.

Invited Presentations and Panels

1. Co-Presenter: ***Nifty Assignments***, Nick Parlante, Julie Zelenski, David Feinberg, Keith Schwarz, Michelle Craig, Stuart Hanser, and Michael Scott. Special Session at the 42nd ACM Technical Symposium on Computer Science Education, Dallas, TX, March 12, 2011.
2. Co-Presenter: Increasing Enrollment in High School Computer Science Classes, Session at the ACM, Special Interest Group for Computer Science Education, The 40th ACM Technical Symposium on Computer Science Education, March 4 - 7, 2009.
3. "How to Run a Hands on Programming Contest" and "Data Structures and Algorithms", UIL Student Activities Conference, University of Texas, Austin, TX, October 13, 2007 and October 4, 2008.
4. "AP Computer Science Update", Texas Computer Education Association Annual Convention, Austin Texas, February 8, 2007.
5. Tutorial: "The UIL Computer Science Contest" and "Computational Thinking," UIL Student Activities Conference, West Texas A & M University, Canyon, TX, September 16, 2006, Tyler Community College, Tyler, TX, September 23, 2006, University of Texas, Austin, TX, October 21, 2006, Texas A & M University Corpus Christi, Corpus Christi, TX, November 4, 2006.
6. Tutorial: Computer Science Teacher Training, Pflugerville High School, August 28, 2006.
7. Tutorial: "The Advanced Placement Computer Science Exam: Object Oriented Program, Data Structures, and Algorithms," Pflugerville ISD student preparation and tutoring (12 hours of instruction), Pflugerville, TX, 2005 – 2006 school year.
8. "The University of Texas at Austin Computer Science Department Road Show," Texas Computer Education Association Annual Convention, Austin Texas, February 8, 2006.
9. "New topics in the UIL Computer Science Contest," UIL Student Activities Conference, Texas Tech University, Lubbock, TX, September 10, 2005, University of North Texas, Denton, TX, September 17, 2005, and University of Texas, Austin, TX, October 1, 2005.
10. Tutorial: "The Advanced Placement Computer Science Exam: Object Oriented Program, Data Structures, and Algorithms," Pflugerville ISD student preparation and tutoring (16 hours of instruction), Pflugerville, TX, 2004 – 2005 school year.

11. "Java in the Advanced Placement Computer Science A course," Pasadena ISD Computer Science teachers one-day workshop, Pasadena High School, Houston, TX, August 12, 2004.
12. "Data Structures and Object Oriented Programming in Java," Fort Bend ISD Computer Science teachers one-day workshop, Elkins High School, Houston, TX, August 5, 2004.
13. Tutorial: "The Advanced Placement Computer Science Exam: Object Oriented Program, Data Structures, and Algorithms," Pflugerville ISD student preparation and tutoring (12 hours of instruction), Pflugerville, TX, 2003 – 2004 school year.
14. "Java and the UIL Computer Science Contest,", UIL Student Activities Conference, Texas Tech University, Lubbock, TX, September 27, 2003 and University of Texas, Austin, TX, October 25, 2003.
15. Tutorial: "The Advanced Placement Computer Science Exam: Object Oriented Program, Data Structures, and Algorithms," Pflugerville ISD student preparation and tutoring (8 hours of instruction), Pflugerville, TX, April 2003.
16. "Using Java in Advanced Placement Computer Science," one day Workshop, Texas Computer Education Association Annual Convention, Austin Texas, February 2003.

Invited Workshops

1. Invited Workshop Presenter: "Advanced Placement Computer Science", College Board two-day workshop, Norman, OK, January 18-19, 2008.
2. Invited Workshop Presenter: "Advanced Placement Computer Science", College Board two-day workshop, Cypress Woods High School, Houston, TX, November 9-10, 2007.
3. "Advanced Placement Computer Science", College Board 2 day workshop, Cypress Woods High School, Houston, TX, November 10-11, 2006.
4. Leader: "Creating an Advanced Placement Computer Science Program", College Board 1 Day Advanced Placement Computer Science Workshop, Westlake High School, Austin, TX, April 8, 2006.
5. Various lectures on Object Oriented Programming, Data Structures, Recursion, and Algorithm Analysis, College Board 2 Day Advanced Placement Computer Science workshop, St. Mary's Hall, San Antonio, TX, February 10-11, 2006.
6. Various lectures on topics such as Teaching Objected Oriented Programming, Data Structures, and Nifty Assignments, College Board 2 Day Advanced Placement Computer Science workshop, Norman, OK, January 23 – 24, 2004.
7. Various lectures on topics such as moving from C++ to Java, Object Oriented Programming, Creating an Advanced Placement Computer Science Program, and Tools for Teaching Programming and Java, College Board one-day Advanced Placement Computer Science workshop, Pope John XXIII High School, Sparta, NJ, October 11, 2003.
8. "Using Java in the Advanced Placement Computer Science A course," College Board 1 Day Advanced Placement Computer Science Workshop, Akins High School, Austin, TX, April, 2003.

9. "Intermediate Java Programming for Advanced Placement Computer Science Teachers," Arlington ISD Computer Science teachers four day workshop, Arlington High School, Arlington, TX, June 24 – 27, 2002.
10. "From C++ to Java" and "Object Oriented Programming: Fundamentals and Teaching the Concepts", College Board two-day Advanced Placement Computer Science workshop, Plano High School, Plano, TX, October 2002.
11. "An Introduction to Teaching Introductory Programming and Computer Science with Java," Round Rock ISD Computer Science Teachers three day workshop, Round Rock High School, Round Rock, TX, May 29 – 31, 2001.

Professional Services

Journal, Conference, and Book Reviewing

1. Workshop Proposal Reviewer: 2012 - 2016 Computer Science Teachers Association Annual Conference, Workshop Proposal Reviewer.
2. Reviewer for Birds of a Feather Sessions: ACM Special Interest Group for Computer Science Education, (SIGCSE), 2008 ACM-SIGCSE Symposium.
3. Unpublished Book Review: *Java: An Introduction*, by Ralph Bravaco and Shai Simonson, McGraw-Hill. June 2006.
4. Unpublished Book Review: *Building Java Programs*, by Stuart Reges and Marty Stepp, Addison-Wesley. Fall 2005.
5. Unpublished Informal Book Review: *An Active Learning Approach to Data Structures* using Java, by Timothy Budd, Addison-Wesley, Summer 2005.
6. Unpublished Informal Book Review: *Data Structures and the Java Collections Framework*, William J. Collins. McGraw Hill, 2005.
7. Unpublished Book Review: *Objects, Abstraction, Data Structures, and Design Using Java*, Elliot B. Koffman and Paul A. T. Wolfgang. John Wiley & Sons, Inc. 2005.
8. Unpublished Book Review: *Java Program Design*, James P. Cohoon and Jack W. Davidson. McGraw Hill, 2004.
9. Unpublished Book Review: *Python Programming: An Introduction to Computer Science*, John Zelle, Franklin, Beedle, & Associates, 2004.

Grant Proposal Reviewing

1. National Science Foundation, Division of Elementary, Secondary, and Informal Education. November, 2004**.**