

Julia Olkin, Ph.D.

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Citizenship: USA

Education

- Ph.D.** Rice University, Mathematical Sciences, 1986
Dissertation: *Linear and Nonlinear Deconvolution Problems*
- M.A.** Rice University, Mathematical Sciences, 1985
- B.A.** Pomona College, Mathematics, 1981

Teaching Experience

- 2018-** Professor, Dept. of Mathematics, California State University, East Bay
- 2013-2018** Associate Professor, Dept. of Mathematics, California State University, East Bay
- 2007-2013** Assistant Professor, Dept. of Mathematics and Computer Science, California State University, East Bay
- 2005-2007** Lecturer, Dept. of Mathematics and Computer Science, California State University, East Bay

Courses Taught

- Lower Division:** College Algebra (1130), Business Calculus (1810), Calculus I-III (1304/1305/2304), Numerical Algorithms & Linear Algebra for Computer Science (225),
- Upper Division:** Linear Algebra (3100); Differential Equations (DE), Ordinary DE, Partial DE (3331/3361/4361); Numerical Analysis I, II (3750/4750); Linear Programming (3841); Linear Optimization (4841)
- Graduate Level:** Advanced Topics in Linear Optimization (6840); Advanced Topics in Optimization (6842); Advanced Topics in Numerical Analysis (6750)

- 2005-2007** MathCounts[®] Coordinator/Coach, Canyon Middle School, Castro Valley, CA. A national math enrichment, coaching and competition program that promotes middle school mathematics.
- 2007-2013** TJ/F18:

2016-2017 Bridging the Gap, a partnership between Peralta Community College District, Oakland Unified, Berkeley Unified, and CSUEB, funded by the James Irvine Foundation. Two goals are to increase the number of students who, upon high school graduation, will enroll and be successful in college level mathematics, and to develop and pilot innovative practices.

2016-2017 Teaching for Effectiveness and Equity in Mathematics (TEEM) in Hayward Unified School District, supported by the California Dept. of Education. Form a professional learning community of TK-3 teachers and administrators to improve early math skills and vertical articulation of math instruction and to increase mathematical discourse. **(Co-PI)**

improve their knowledge of the math fundamentals and understanding of the underlying concepts in an effort to better prepare them and their students for Algebra I. (PI)

2010-2011 Grant from PG&E to create math modules to teach in middle school math classes, demonstrating the application of math to real-world situations, with an emphasis on energy related applications.

2010-2011 Strengthening Math Instruction (SMI) seminar: developed a pre-service workshop SMI geared to professors throughout CSU who teach the math methods courses to potential high school teachers. Funded by the Chancellor's office.

2010-2011 Served as Advisor to the Foundational Math program, a one year program for candidates getting a Foundational Math Credential.

2009 Served as Math Consultant to a summer Algebra Academy program, serving predominantly African American rising 8th and 9th graders in a 5-week intensive summer program. The program is run by RT Fisher, with support from CSUEB.

Professional Experience

1997-1998 Senior Research Mathematician, Vista Research Inc, Mountain View, CA

1987-1997 Senior Research Mathematician, SRI International, Menlo Park, CA

1986-1987 Senior Software Mathematician, Ferranti International Controls, Sugarland, TX

1984-1985 Mathematician, Shell Development Co, Houston, TX

1982-1983 Mathematician, Exxon Production Research, Houston, TX

Publications

1. Olkin, J. & Callahan, K (2016). *Math 805, Math 806, Math 807 Textbook*. Hayden-McNeil LLC, Macmillan Learning Curriculum Solutions.
2. Naghshineh, K., Olkin, J, Heck. L.P., & Kamman, J.W., (1998). Evaluation of an actuator placement method for active noise control applications. *ASME Journal of Vibration and Acoustics*, **120**, No. 4, pp. 875-879.
3. Olkin, J, Heck, L.P., & Naghshineh, K. (1998). Transducer placement for broadband active vibration control using a novel multidimensional QR factorization. *ASME Journal of Vibration and Acoustics*, **120**, No. 3, pp. 663-671.
4. Barnum, J, Nowlin, W.D., & Olkin, J. (1997). Detection of ships with OTH radar using short integration times. *Proceedings of IEEE National Radar Conference, Syracuse, NY* pp. 1-6.

11. Olkin, J & Douglas, S.C. (1993). Multiple-input, multiple-output, multiple-error adaptive feedforward control, using the filtered-X normalized LMS algorithm. *Proceedings of the Second Conference of Recent Advances in Active Control of Sound and Vibration*, pp. 743-755.
12. Chan, T.F. & Olkin, J (1994). Circulant preconditioners for Toeplitz-block matrices. *Numerical Algorithms*, **6**, No. 1-2, pp. 89-101.
13. Olkin, J, Freed, M.S. & Jungers, P.D. (1994). SRI weights algorithms and performance simulation (SWAPS) code. *Technical Report, SRI International*, pp. 1-59.

- 1997 Outstanding Oral Presentation winner at IEEE National Radar Conference, Syracuse, NY
- 1989-2000 Winner of numerous speech contest awards in Toastmasters, Bay Area, CA, at Club, Area, Division and District levels.
- 1984 Recipient of Grant-In-Aid award from Getty Foundation

Service

- 2017- Graduate Coordinator for the Mathematics Department
- 2017-2018 Chair, Search Committee, Mathematics Department
- 2017-2018 Participate in pilot program, testing the Quantitative Reasoning rubric in my math course.
- 2014-2017 Co-Chair, Board of the Institute for STEM Education. Faculty Board Member since inception, 2012.
- 2016 Co-Lead, Subcommittee on Quantitative Reasoning ILO rubric development.
- 2010-2016 Organized a Meet & Greet session for all Math Masters students. Presented information on classes and comprehensive exams. Held every even year during the beginning of Fall Term.
- 2009-2015 Served as Department Liaison to College of Science for the Science Festival. Participated in the Science Festival, held every odd year during Fall Term. Created and manned the "Can You KenKen" booth and puzzle booths, and recruited many student volunteers to help out.
- 2007-ongoing Chair of the Math Comprehensive Exams Committee, responsible for writing and grading the Math Comprehensive Exams and all organizational tasks including registration, proctoring, keeping records of student performance, etc.
- 2010-2014 Member of Academic Senate representing College of Science (two sequential two-year appointments)
- 2008-2010 Chair, Committee on Research (two-year appointment)
- 1994 Chair, Committee to review Vacation/Sick Leave policies and make recommendations for Improvements. Endorsed by CEO of SRI International
- 1991-1992 Editor, Society for Industrial and Applied Mathematics Special Interest Group in Linear Algebra electronic newsletter

Membership

- CAMTE** California Association of Mathematics Teacher Educators
- MAA** Math Association of America
- NCTM** National Council of Teachers of Mathematics
- SIAM** Society of Industrial and Applied Mathematics
- Sigma Xi** The Scientific Research Society