

Murali Sitaraman

a. Professional Preparation

Madras University, Chennai India	Electrical & Electronics Engineering	B.S. (Honors) 1983
Indian Inst. of Science, Bangalore, India	Computer Science	M.S.(Distinction)1985
Ohio State University, Columbus, Ohio	Computer & Information Science	Ph.D., 1990

b. Appointments

2015-Present	Interim Chair, Division of Computer Science, School of Computing, Clemson University
2005-Present	Professor, School of Computing, Clemson University
2000-2005	Associate Professor with tenure, Computer Science, Clemson University
1996-2000	Associate Professor with tenure, Computer Science and Electrical Engineering, West Virginia University,
1990-1996	Assistant Professor, Computer Science and Electrical Engineering, West Virginia University
1985-1986	Staff and Technical Project Coordinator, Madras Computer Labs, Chennai, India,

c. Products

Five Products Most Closely Related to the Proposed Project

1. Drachova, S., Hallstrom, J. O., Hollingsworth, J. E., Krone, J., Pak, R., and Sitaraman, M., "Teaching Mathematical Reasoning Principles for Software Correctness and Its Assessment," *ACM Transactions on Computing Education*, August 2015.
2. Hallstrom, J. O., Hochrine, C., Sorber, J., and Sitaraman, M., "An ACM 2013 Exemplar Course Integrating Fundamentals, Languages, and Software Engineering," In *Procs. 45th ACM Technical Symposium on Computer Science Education (SIGCSE)*, ACM Press, 2014.
3. Leonard, D.P., Hallstrom, J.O., Sitaraman, M., "Injecting Rapid Feedback and Collaborative Reasoning in Teaching Specifications", In *Procs. 40th ACM Technical Symposium on Computer Science Education (SIGCSE)*, ACM Press, March 2009, 524-528.
4. Sitaraman, M., Hallstrom, J.O., White, J., Drachova-Strang, S., Harton, H., Leonard, D., Krone, J., and Pak, R. "Engaging Students in Specification and Reasoning: "Hands-On" Experimentation and Evaluation," In *Procs. 14th ACM SIGCSE Conf. on Innovation and Technology in CS Education (ITiCSE)*, ACM Press, 2009, 50-54.
5. Sitaraman, M., Long, T.J., Weide, B. W., Harner, E. J., and Wang, L., "Teaching Component-Based Software Engineering: A Formal Approach and Its Evaluation," *Computer Science Education 12*, Nos. 1 – 2, Swets & Zeitlinger, March 2002, 11-36.

Five Other Significant Products

1. Cook, C. T., Sun, Y-S., and Sitaraman, M., "Experience Report: Evolution of a Web-Integrated Software Development and Verification Environment," *Software – Practice & Experience 44*, John Wiley & Sons, April 2014.
2. Sitaraman, M., Adcock, B., Avigad, J., Bronish, D., Bucci, B., Frazier, D., Friedman, H.M., Harton, Heym, W., Kirschenbaum, J., Krone, J., Smith, H., and Weide, B.W., "Building a Push-Button RESOLVE Verifier: Progress and Challenges", *Formal Aspects of Computing 23*, 5, 2011, 607-626.

3. Edwards, S.H., Sitaraman, M., Weide, B.W., and Hollingsworth, J. E., “Contract-Checking Wrappers for C++ Classes”, *IEEE Transactions on Software Engineering* 30, November 2004, 794-810.
4. *Foundations of Component-Based Systems*, Eds. G. T. Leavens and M. Sitaraman, Cambridge University Press, 2000, 310 pages.
5. Sitaraman, M., Weide, B.W., and Ogden, W.F., “On the Practical Need for Abstraction Relations to Verify Abstract Data Type Representations”, *IEEE Transactions on Software Engineering* 23, 3, March 1997, 157-170.

d. Synergistic Activities

1. Sitaraman is a principal investigator of the RESOLVE research and education effort, a software engineering project spanning nearly 3 decades, involving multiple institutions.
2. NSF has funded Sitaraman’s research and educational activities in software engineering continuously since 1992. The grants have helped him incorporate principles of formal verification and software component design and specification research principles in undergraduate and graduate courses at Clemson and several other institutions.
3. Sitaraman has offered 10 workshops at ACM SIGCSE and ACM Southeast Conference to disseminate principles of mathematical reasoning to CS educators.
4. Sitaraman has advised over 25 undergraduate students, including a dozen women and minority students in the last few years with NSF REU supplements; 3 of 4 his Ph. D. student graduates in the last 5 years are women as is one of his current Ph. D. students. One of his current Ph. D. students is a veteran.
5. In 1997, with Leavens, Sitaraman initiated the ACM SIGSOFT SAVCBS series of workshops on *Specification and Verification of Component-Based Systems*.