Curriculum Vitae

Lori Carter

Point Loma Nazarene University
Mathematical, Information and Computer Sciences Dept.
San Diego, CA 92106
619-849-2352
loricarter@pointloma.edu
http://www.pointloma.edu/MICS/FacultyStaff/Carter.htm

Education

University of California, San Diego, La Jolla, CA	
Ph.D. in Computer Science	2002
Dissertation: "Compiler and Hardware Predicated Dependency Analysis and Scheduling"	
California State University, Northridge, Northridge, CA	
M.S. in Computer Science	1985
Thesis: "The Effects of Indentation on Debugging"	
Point Loma College, San Diego, CA	
B.S. in Speech Communication Theory Graduated summa cum laude	1979

Awards

NSF S-STEM grant for scholarships in Computational Science	2015
Point Loma Nazarene University Alumni grant for development of a computer platform for computational science education and research	2014
Sabbatical – "Development of a Computational Science Minor."	2012
Dean's award for outstanding teaching, Point Loma Nazarene University	2007
Point Loma Nazarene University Alumni grant for advancing interdisciplinary Computer Science across the campus.	2006
Point Loma Nazarene University RASP grant for the development of simulators to aid in Computer Science instruction, and to provide research experience for undergraduate students.	2003

Teaching Experience

	Point Loma Nazarene University	
	Professor of Computer Science	2007-present
	Developed service learning curriculum Developed Computational Science curriculum Honors project mentor (10) Summer undergraduate research (8)	
	Associate Professor of Computer Science	2003-2007
	Honors project mentor (4) Summer Undergrad Research(3) Designed and Implemented Intro to CS Seminar for High School Students	
	Assistant Professor of Computer Science Honors project mentor Summer research	2002-2003
	Adjunct Professor of Mathematics and Computer Science	1987-1996
	University of California, San Diego	
	Head Teaching Assistant Responsible for training other teaching assistants	1997-2000
	Teaching Assistant Computer Architecture, Data Structures	1996-1997
	Palomar College, San Marcos, CA **Adjunct Professor**	1985-1987

Related Experience

	TRW, Redondo Beach, CA **Member of the Technical Staff** Database design	1983-1984
	CADAM Inc., Burbank, CA **Maintenance Programmer** Take calls from customers and fix bugs in Computer Aided Design Program	1981-1983
	Jet Propulsion Lab, Pasadena, CA **Technical Writer** Created manuals for real time telemetry technicians	1980-1981

Professional Activity

	• Program Committee: SIGCSE Technical SYmposium	2016

	• Program Committee: Celebration of Women in Computing 2016 • Reviewer for SIGCSE Technical Symposium on Computer Science Education • General Co-chair: SoCal Celebration of Women in Computing conference 2014 • Program Reviewer – Math and Computer Science Department La Sierra University • Program Committee: Celebration of Women in Computing conference 2012 • Reviewer for ITiCSE Conference on Innovation and Technology in CS Education • Program Committee CCSC Southwestern Region Conference • Reviewer for Communications of the ACM • Co-chaired and hosted PLNU Computer Science Undergrad Research Conferences • Reviewer for Computer Architecture Education Workshop	2004-2015 2014 2013 2012 2006-2010 2007-2008 2007 2005-2006 2003

Publications

"*Computer Programming … Simply: A Brief Introduction to Computer Programming in Plain English*." Lori Carter, Amazon Digital Services LLC (September, 2016)

"Undergraduate programs in computational science." Lori Carter, Tim Little, Claire Mathews. *Journal of Computing Sciences in Colleges* 30, 4 (April 2015), 83-91.

"Interdisciplinary Computing Classes: Worth the Effort." Lori Carter, *Proceedings of the 45th SIGCSE Technical Symposium on Computer Science Education, March 2014.*

"Computational Science Programs: The Background Work" Lori Carter, Ryan Botts and Catherine Crockett, *Proceedings of FIE 2012, Frontiers in Education, October 2012.*

"Ideas for Adding Soft Skills Education to Service Learning and Capstone Courses for Computer Science Students." Lori Carter, *Proceedings of the 42nd SIGCSE Technical Symposium on Computer Science Education, March 2011.*

"Lessons Learned: A Journey in Computational Science." Ryan T. Botts and Lori Carter. *Association of Christians in the Mathematical Sciences Online Journal, June 2011*

"Bridging the Technology Gap: An Analysis of Industry Needs and Student Skills" Lori Carter and Catherine Marcarelli, *Proceedings of FIE 2009, Frontiers in Education, October 2009.*

"The Business of Service Learning", Lori Carter, *Proceedings of FIE 2009, Frontiers in Education, October 2009.*

"Problems with Computer Gaming May Contribute to Retention Troubles for CS Students", Lori Carter and Anna Hail, *Journal of Computing Sciences in Colleges, March 2009.*	
"Introduction to Computers: An Interdisciplinary Approach." Lori Carter and Scott Osborne, *Proceedings of FIE 2007, Frontiers in Education, October 2007*	
"Success in CS: Is Culture a Factor?" Lori Carter, Luke Jernejcic, Nicodemus Lim, *Proceedings of FIE 2007, Frontiers in Education, October 2007*	
"Why Students with an Aptitude for Computer Science Don't Choose to Major in Computer Science." Lori Carter, *Proceedings of the 37th SIGCSE Technical Symposium on Computer Science Education, March 2006.*	
"Bridging the Gap Between the Undergraduate and Graduate Experiences in Computer Systems Studies." Lori Carter and Scott Rae*, 10th Workshop on Computer Architecture Education, June 2003.*	
"Using Predicate Path Information in Hardware to Determine True Dependences." Lori Carter and Brad Calder*, Proceedings of the International Conference on Supercomputing, June 2002.*	
"An EPIC Processor with Pending Functional Units." Lori Carter, Weihaw Chuang and Brad Calder*, Proceedings of the Fourth International Symposium on High Performance Computing, May 2002.*	
"Path Analysis and Renaming for Predicated Instruction Scheduling." Lori Carter, Beth Simon, Brad Calder, and Jeanne Ferrante , *International Journal for Parallel Programming. 2000.* December, 2000. pages 563-588.	
"Predicated Static Single Assignment."Lori Carter, Beth Simon, Brad Calder, Larry Carter, Jeanne Ferrante, *International Conference on Parallel Architectures and Compilation Techniques (PACT).* October 1999.	

Books

Computer Programming … Simply: A Brief Introduction to Computer Programming in Plain English. Lori Carter. September 2016. Amazon Digital Services LLC	

Other Presentations

"*Preparing K-12 Teachers to Inspire Future Coders.*" Lori Carter and Catherine Crockett. Faculty Scholarship Day. PLNU, August 1017	
"*Including a Writing Project in a Service Learning Course for Mathematics and Computer Science Students is a Win for Both Students and Professor.*" Lori Carter. Association of Christians in the Mathematical Sciences, Charleston, S.C. June 2017	

Commencement Address, Point Loma Nazarene University, May 2017 "Perspectives on Grant Writing for NSF." Lori Carter. Nazarene IBOE Professional Grant Writers Meeting, Bourbonnais, IL, July 2016 "Computing Across the Disciplines." Lori Carter. Faculty Scholarship Day, PLNU, August 2015 "Biology Inspired Computing Exercises." Lori Carter. Association of Christians in the Mathematical Sciences, June 2015 "Hybrid Classes in Mathematics and Computer Science –(Panel)" Ryan Botts, Lori Carter, Catherine Crockett, Greg Crow, and Maria Zack: Association of Christians in the Mathematical Sciences Nineteenth Biennial Conference, at Redeemer University College (Ancaster, ON, Canada) 27-May to 30-May 2015. Carter, L., Little, T. & Mathews, C. (2015). "Moving Ahead with Computational Science Programs." Poster presentation at the 46th SIGCSE Technical Symposium on Computer Science Education (SIGCSE 15), Kansas City, Missouri, USA "Successes and Challenges in Interdisciplinary Education." Lori Carter. *Association of Christians in the Mathematical Sciences, June 2013* "The Role of Computing in Biology and Medicine: A Sabbatical Project:"Lori Carter. Faculty Scholarship Day, PLNU, August 2012 "The Use of Computing in Biology and Medicine." Lori Carter. Celebration of Women in Computing Conference, April 2012. "Lessons Learned: A Journey in Computational Science." Ryan T. Botts and Lori Carter. *Association of Christians in the Mathematical Sciences, June 2011* Keynote address: "Computer Gaming: The Good and the Bad" Lori Carter and Anna Hail *Association for Christians in the Mathematical Sciences (ACMS), May 2009.* "Predication in DSP Architectures: Maximized Benefit, Minimized Cost", Lori Carter, Presentation for *Association for Christians in the Mathematical Sciences (ACMS), May 2003*	

Courses Taught

• CSC 122: Introduction to Computers • CSC 132: Introduction to Computer Science • CSC 134: Introduction to Computer Science – C++ • CSC 142: Introduction to Computer Programming - Java • CSC 154: Fundamentals of Computer Science • CSC 191: Databases and Data Mining	

	• CSC 252/254: Data Structures • CSC 302: Python and Unix Scripting for Computational Science • CSC 314: Operating Systems • CSC 322: Data Management for Computational Science • CSC 354: Algorithm Analysis and Theory of Computation • CSC 374 Computer Networking • CSC 394 Programming Languages • CSC 412: Special Topics – Computer simulations • CSC 412: Special Topics - Multi-core/Multithreading • CSC 412: Special Topics – Programming for Mobile Devices • CSC 454: Computer Architecture and Assembly Language • CSC 481: Senior Seminar • CSC 496: Service Learning I • CSC 497: Service Learning 2 • ISS 232: Introduction to Information Systems • ISS 242: Visual Programming for Business Applications • MTH 303: Problem Solving • MTH 099: Elementary Algebra	
Memberships and Affiliations		
	• Association for Computing Machinery • Special Interest Group for Computer Science Education • American Society for Engineering Education • Association for Christians in the Mathematical Sciences • Computer Science Teachers Association	