

## Ferosh Jacob

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### Education

University of Alabama, Tuscaloosa, AL, Ph.D., Computer Science, 2010-present.

Clarkson University, Potsdam, M.S., Computer Science, 2007-09.

National Institute of Technology Calicut India, B.Tech., Electronics and Communication, 2000-04.

### Experience

**Research Assistant**, Department of Computer Science, University of Alabama, Tuscaloosa, AL, 2010-11.

**Teaching Assistant**, Department of Computer Science and Information Sciences, University of Alabama at Birmingham, Birmingham, AL, 2009-10.

**Teaching Assistant**, Department of Computer Science and Mathematics, Clarkson University, Potsdam, NY, 2008-09.

**On Campus Ambassador** Sun MicroSystems, Clarkson University, Potsdam, NY, 2007-08.

**Software Engineer** Stabilix Private Solutions Ltd, Trivandrum India, 2004-07.

### Publications

#### Journal papers

Ferosh Jacob, Amber Wagner, Prateek Bahri, Susan Vrbsky, and Jeff Gray “Simplifying the development and deployment of mapreduce algorithms,” *International Journal of Next-Generation Computing* (Special Issue on Cloud Computing Yugyung Lee and Praveen Rao, eds.), vol. 2, no. 2, 2011, pp. 123-142.

#### Conference papers

Ferosh Jacob, Yu Sun, Jeff Gray, and Puri Bangalore, “A platform-independent tool for modeling parallel programs,” in *Proceedings of the 49th ACM Southeast Regional Conference*, Kennesaw, GA, March 2011, pp. 138-143.

Ferosh Jacob, David Whittaker, Sagar Thapaliya, Purushotham Bangalore, Marjan Mernik, and Jeff Gray, “CUDAACL: A tool for CUDA and OpenCL programmers,” in *Proceedings of the 17th International Conference on High Performance Computing*, Goa, India, December 2010, pp. 1-11.

Ferosh Jacob, Ritu Arora, Purushotham Bangalore, Marjan Mernik, and Jeff Gray, “Raising the level of abstraction of GPU-programming,” in *Proceedings of the 16th International Conference on Parallel and Distributed Processing*, Las Vegas, NV, July 2010, pp. 339-345.

Ferosh Jacob and Robert Tairas, “Template inference using language models,” in *Proceedings of the 48th ACM Southeast Regional Conference*, Oxford, MS, April 2010, pp. 104-109.

Daqing Hou, Ferosh Jacob, and Patricia Jablonski, “Exploring the design space of proactive tool support for copy-and-paste programming,” in *Proceedings of the 19th International Conference of Center for Advanced Studies on Collaborative Research*, Ontario, Canada, November 2009, pp. 188-202.

#### Workshop and Short Papers

Robert Tairas, Ferosh Jacob and Jeff Gray, “Representing clones in a localized manner”, in *Proceedings of the 5th International Workshop on Software Clones*, Waikiki, Hawaii, May 2011, pp. 54-60.

Ferosh Jacob, Jeff Gray, Purushotham Bangalore, and Marjan Mernik, “Refining high performance FORTRAN code from programming model dependencies” in *Proceedings of the 17th International Conference on High Performance Computing Student Research Symposium*, Goa, India, December 2010, pp. 1-5.

Ferosh Jacob, Daqing Hou, and Patricia Jablonski, “Actively comparing clones inside the code editor,” in *Proceedings of the 4th International Workshop on Software Clones*, Cape Town, South Africa, May 2010, pp. 9-16.

Daqing Hou, Ferosh Jacob, and Patricia Jablonski, “Proactively managing copy-and-paste induced code clones,” in *Proceedings of the 25th International Conference on Software Maintenance*, Alberta, Canada, September 2009, pp. 391-392.

Daqing Hou, Ferosh Jacob, and Patricia Jablonski, “CnP: Towards an environment for the proactive management of copy-and-paste programming,” in *Proceedings of the 17th International Conference on Program Comprehension*, British Columbia, Canada, May 2009, pp. 238-242.

### Master’s Thesis

“CSeR - A code editor for tracking & visualizing detailed clone differences,” *Clarkson University*, Potsdam, NY, June 2009.

### Doctoral Symposium

“CUDA+L: A Framework for GPU Programs,” *International Conference on Object-Oriented Programming, Systems, Languages, and Applications (SPLASH/OOPSLA)*, Portland, OR, October 2011.

### Posters

“Refining high performance FORTRAN code from programming model dependencies” *International Conference on High Performance Computing Student Research Symposium*, Goa, India, December 2010. (Best Presentation Award)

“Extending abstract APIs to shared memory,” *International Conference on Object-Oriented Programming, Systems, Languages, and Applications (SPLASH/OOPSLA) Student Research Competition*, Reno, NV, October 2010. (Bronze Medal)

“CSeR: A code editor for tracking and highlighting detailed clone differences,” *International Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA) Refactoring Workshop*, Orlando, FL, October 2009.

## Awards and Honors

### Prizes:

- ACM Outstanding Graduate Student in Computer Science for Honors Day 2011 in *University of Alabama*, April 2011.
- Best Presentation Award in *International Conference on High Performance Computing (HIPC) Student Research Symposium*, Goa, India, December 2010.
- Bronze Medal in *International Conference on Object-Oriented Programming, Systems, Languages, and Applications (SPLASH/OOPSLA) Student Research Competition*, Reno, NV, October 2010.

### Reviewer:

- *MODELS*, Wellington, New Zealand, October 2011.
- *SPLASH/OOPSLA*, Portland, Oregon, October 2011.
- *TOOLS Europe*, Zurich, Switzerland, June 2011.
- *Aspect-Oriented Software Development*, Pernambuco, Brazil, March 2011.
- *Journal of Supercomputing*, October 2010.

- *ACM Southeast Regional Conference*, Oxford, MS, March 2010.

**Certifications:**

- *Microsoft Certified Programmer (MCP)*.
- *Sun Certified Java Programmer (SCJP)*.

**Travel awards:**

- *NSF/TCPP Student Travel Award for HIPC 2010*.
- *Stipend for ACM Student Research Competition SPLASH 2010*.
- *UA Graduate student travel award for SPLASH 2010, ACM Southeast Conference 2011*.
- *UAB Graduate student travel award for OOPSLA 2009*.

**Conferences and Workshops attended:**

- *ACM Southeast Conference (ACMSE)*, Kennesaw, GA, March 2011.
- *International Conference on High Performance Computing (HIPC)*, Goa, India, December 2010.
- *NVIDIA GPU Technology Conference*, San Jose, CA, November 2010.
- *International Conference on Object-Oriented Programming, Systems, Languages, and Applications (SPLASH/OOPSLA)*, Reno, NV, October 2010.
- *Workshop on Language-level Approaches for Retargetable High-Performance Computational Science Applications*, Houston, TX, October 2010.
- *International Conference on Parallel and Distributed Processing (PDPTA)*, Las Vegas, NV, July 2010.
- *International Conference on Software Engineering (ICSE)*, Cape Town, South Africa, May 2010.
- *ACM Southeast Conference (ACMSE)*, Oxford, MS, April 2010.
- *International Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, Orlando, FL, October 2009.
- *International Conference of Center for Advanced Studies on Collaborative Research (CASCON)*, Ontario, Canada, November 2008.