ARUN KALYANASUNDARAM

PERSONAL INFORMATION

Areas of Interest: Distributed Collaborations, Social Network Analysis, Multi-agent Systems Computational Modeling, Applied Machine Learning.

Email: arunkaly@cs.cmu.edu, arun.kalyan.sundaram@gmail.com Tel: 412-608-9841

Homepage: http://www.cs.cmu.edu/~arunkaly

EDUCATION

Carnegie Mellon University

Ph.D. in Computation, Organizations & Society GPA: 3.92 Aug. 2013 - Present
School of Computer Science

International Institute of Information Technology Bangalore (IIIT-B), India

Master of Technology in Computer Science. GPA: 3.89 / 4.0 Jul. 2009 - Jul. 2011
(Rank 2 out of 153)

Birla Institute of Technology and Science, Pilani, India

Bachelor of Engineering [Hons.] in Electronics and Instrumentation Engineering. GPA: 8.19 / 10.0 Aug 2001 - Jun. 2006
Master of Science [Hons.] in Chemistry.

PROFESSIONAL EXPERIENCE

Hewlett-Packard Company, India - *Senior Software Engineer* Jul. 2011 – July 2013
(Deputed at Hewlett-Packard Labs)

Hewlett-Packard Labs, India - *Research Intern* Jan. 2011 – Jun. 2011

Novell Inc., India - *Senior Software Engineer* Jul. 2007 – Jul. 2009

Verizon Data Service India Pvt. Ltd., India – *Software Engineer* Jun. 2006 – Jul. 2007

COMPUTER SKILLS

Languages: C, Java, Html/CSS, JavaScript, Python.

Tools: SPSS, R, Weka, Matlab.

PUBLICATIONS (PEER REVIEWED CONFERENCES)

- E. Trainer, C. Chaihirunkarn, **A. Kalyanasundaram**, J. Herbsleb, "Community Code Engagements: Summer of Code & Hackathons for Community Building in Scientific Software", To Appear: *In Proceedings of ACM Group 2014.*

- E. Trainer, C. Chaihirunkarn, **A. Kalyanasundaram**, J. Herbsleb, "From Personal Tool to Community Resource: What's the Extra Work and Who Will Do It?", To Appear: *In Proceedings of ACM CSCW 2015*
- P. Chandra, and **A. Kalyanasundaram**, "A Network Pruning Based Approach for Subset Specific Influential Detection," In *Proceedings of the 4th Annual ACM Web Science conference (WebSci 2012)*, Evanston, Illinois, USA, Jun. 2012, pp.57-66, doi: 10.1145/2380718.2380726 [Full Paper] [Best Paper Nominee]
- **A. Kalyanasundaram**, R. A. K. Lalkhanwar, and S. Rao, "Fail-Stop Distributed Combinatorial Auctioning Systems with Fair Resource Allocation," in *7th Annual IEEE Conference on Automation Science and Engineering (IEEE CASE 2011)*, Trieste, Italy, Aug. 2011, pp.181–188, doi:10.1109/CASE.2011.6042428. [Full Paper]
- **A. Kalyanasundaram**, B. B. Roy, and S. Rao, "Exploiting Data Parallelism in SELinux Using a Multicore Processor," in *Proceedings of the 47th Annual National Convention of Computer Society of India (CSI-2012)*, Kolkata, India, Dec. 2012. [Short Paper]

PROJECTS

Sharing and Co-Creation in Scientific Software *(Team Size: 3)*

The project aims at studying the process of software development and sharing in collaborative science.

Measuring the impact of concurrent modifications on quality of articles in Wikipedia *(Team Size: 1)*

Compute various measures of proximity of edits in time and space; perform a comparison between a subset of randomly chosen Wikipedia 'good' and 'featured' articles.

An Agent Based Model of Edit Warring on Wikipedia *(Team Size: 1)*

A game theoretic model of the Edit warring process to predict various outcomes of a given collaboration of editors, such as time to reach consensus and social influence.

Deadlock Detection in JAVA and C# Libraries using Static Analysis *(Team Size: 1)*

Developed a parser to generate method invocation graphs from C# CIL (Common Intermediate Language) and Java disassembled code to detect cycles in the call graph.

A detailed list of projects is available at: http://www.cs.cmu.edu/~arunkaly/projects.html