ARUN KALYANASUNDARAM

PERSONAL INFORMATION

Areas of Interest: Social Media Analytics, Applied Machine Learning, Distributed Systems.

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Homepage: http://www.cs.cmu.edu/~arunkaly *Github*: https://github.com/arunk054

EDUCATION

Ph.D. in Societal Computing GPA: 4.00 Aug. 2013 - Present
Carnegie Mellon University
School of Computer Science

Master of Technology in Computer Science. GPA: 3.89 Jul. 2011
International Institute of Information Technology Bangalore (IIIT-B)

Bachelor of Engineering (Hons.) GPA: 8.2 out Jun. 2006
Electronics & Instrumentation Engineering of 10.0
Birla Institute of Technology & Science, Pilani (BITS, Pilani)

PROFESSIONAL EXPERIENCE

VMware Inc., Palo Alto – *Performance Intern* May 2015 – Aug. 2015

- Developed an auto-scaler service for a cloud computing platform.
- Evaluated its performance by building a cloud native app benchmark using Netflix OSS components.
- Designed workloads using Apache JMeter to simulate real world scenarios.

Hewlett-Packard Company, India - *Senior Software Engineer* Jul. 2011 – Jul. 2013

- Launched several experiments on Amazon Mechanical Turk such as refer a task to friends on Facebook, video analytics, and goal gradient effect on worker performance.
- Filed two Patents – a) Task Assignment and b) Result Aggregation in Crowdsourcing.

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

- Algorithms to detect influential users in a social network and implemented an incentive based routing app on Twitter.

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

- Developed package management features for the SUSE Linux Operating system.
- Led a team of eight engineers on two sprints that lasted for three months.

COMPUTER SKILLS

Programming Languages: Java, C++, JavaScript, Python.

Software Tools: R, Weka, Apache JMeter, Matlab, SPSS.

GRADUATE COURSE WORK

Systems: Distributed Computing, Operating Systems, Computer Architecture.

Analytics: Applied Machine Learning, Computational Modeling, Network Analysis.

SELECTED CONFERENCE PUBLICATIONS - (*All Peer Reviewed*)

- E. Trainer, **A. Kalyanasundaram**, C. Chaihirunkarn, and J. Herbsleb, "*How to Hackathon: Socio-technical Tradeoffs in Brief, Intensive Collocation*" , To Appear: In Proceedings of ACM Computer Supported Cooperative Work and Social Computing (CSCW), 2016.
- **A. Kalyanasundaram**, Wei Wei , Kathleen M. Carley , and James D. herbsleb, "*An Agent-Based Model of Edit Wars in Wikipedia: How and When is Consensus Reached*", To Appear: In Proceedings of the 2015 Winter Simulation Conference (WSC '15)', 2015.
- E. Trainer, C. Chaihirunkarn, **A. Kalyanasundaram**, and J. Herbsleb , "*From Personal Tool to Community Resource: What's the Extra Work and Who Will Do It?*", In Proceedings of the 2015 ACM Computer Supported Cooperative Work and Social Computing (CSCW), 2015, pp. 417-430.
- E. Trainer, C. Chaihirunkarn, **A. Kalyanasundaram**, and J. Herbsleb , "*Community Code Engagements: Summer of Code & Hackathons for Community Building in Scientific Software*", In Proceedings of 2014 ACM Conference on Supporting Group Work (Group 2014), pp. 111-121.
- 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. (*Nominated for best paper award*)
- **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.
- **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 (CASE), 2011.

RECENT PROJECTS (*Only Titles*)

- A Machine Learning Approach to Automatically Label Issues on Github.
- Data Mining for Social Good - A footprint of your online social activism.
- Computational Models of Collaborations such as Hackathons and Wikipedia.