

Ram Raghunathan

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Pittsburgh, PA

(469)237-9168
U.S.A. Citizen

Work Experience

Tower Research Capital

Infrastructure Developer

Infrastructure Developer Intern

Enhanced Performance of Core High Frequency Trading Platform.

- Developed dynamically configurable market data broadcaster.
- Developed ground-up rewrite of core market data access library and trader-facing API.
- Developed high-performance multicast-like system for inter-process communication.
- Evaluated performance of a market data compression scheme.
- Managed infrastructure team laboratory including overhaul of OS imaging system.
- Developed Linux kernel module and user-space library to support Intel Architectural Performance Monitoring system.

New York, NY

July 2011 – July 2013

May – August 2010

Intel Research

Part-Time Intern

Full-Time Summer Intern

Developed Proof of Concept of Networked VOD System.

- Developed proxy MythTV (an open source alternative to TiVo or Windows Media Center) backend.

Pittsburgh, PA

January – May 2009

June – August 2009

Skills

Technical:

- C++, C, Shell Script
- Low-latency Systems
- Multicast Networks
- Unix Programming
- Linux Kernel Module Programming

Personal:

- Team player
- Articulate
- Adaptable
- Analytical

Publications

Gandhi, Anshul, Harchol-Balter, Mor, Raghunathan, Ram, Kozuch, Michael. (2012). "AutoScale: Dynamic, Robust Capacity Management for Multi-Tier Data Centers" *ACM Transactions on Computer Systems*, 30, 4, Article 14.

Gandhi, Anshul, Harchol-Balter, Mor, Raghunathan, Ram, Kozuch, Michael. (2011). "Distributed, Robust Auto-Scaling Policies for Power Management in Compute Intensive Server Farms" *Open Cirrus Summit 2011*

Raghunathan, Ram. (2006). "Does Knowledge about Search Domain Lead to More Efficient Search in Information Retrieval Applications?" *Proceedings of the 1st International Conference on Digital Information Management*, IEEE Press: 442-447.

Education

Carnegie Mellon University

Ph.D. in Computer Science

B.S. in Computer Science (with University and College Honors), Minor: Computational Finance

Senior Thesis: "Design and Implementation of a Power-Aware Load Balancer" (Advisor: Professor Mor Harchol-Balter)

Pittsburgh, PA

August 2013 – Present

Graduated May 2011

Honors

School of Computer Science Alumni Award for Undergraduate Excellence

Awarded for the best Senior Thesis.

2011

Intel First Year Research Experience

Summer Undergraduate Research Fellowship

Worked at Intel Research Pittsburgh on the Neighborhood Aware Networking Project

Spring 2009

Summer 2009

Intel International Science and Engineering Fair

Developed and tested a novel search algorithm that uses information about the search domain

Spring 2007