

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

New York, NY

July 2011 – July 2013

May – August 2010

Enhanced Performance of Core High Frequency Trading Platform.

- Designed and implemented filtering and multiplexing market data broadcaster with dynamic configuration.
- Designed and implemented ground-up rewrite of core market data access library and trader-facing API.
- Designed and implemented high-performance multicast-like system for inter-process communication including management daemon and client libraries.
- Evaluated performance of a market data compression scheme using custom-built simulator.
- Designed, implemented, and tested a standards compliant bitset which supported dynamic allocation and size determination.
- Managed infrastructure team laboratory including overhaul of OS imaging system.
- Designed, implemented, and tested a Linux kernel module and user-space library to support Intel Architectural Performance Monitoring system.

Intel Research

Part-Time Intern

Full-Time Summer Intern

Pittsburgh, PA

January – May 2009

June – August 2009

Developed Proof of Concept of Networked VOD System.

- Developed a solution to reduce video-on-demand providers' load.
- Designed, implemented, and tested proxy MythTV (an open source alternative to TiVo or Windows Media Center) backend.

Skills

Technical:

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

Personal:

- Team player
- Articulate
- Adaptable
- Analytical

Education

Carnegie Mellon University

Ph.D. in Computer Science

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

QPA: 3.72

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