justin@presidentbeef.com 3676 Mentone Ave. Apt 2 Los Angeles, CA 90034 (310) 895-1196

#### **EDUCATION**

PhD, Computer Science, emphasis in Mobile Systems UCLA, Los Angeles, CA, Expected 2012.

Master of Science, Computer Science UCLA, Los Angeles, CA, 2009.

Bachelor of Science, Computer Science Seattle University, Seattle, WA, 2006.

## **SKILLS**

## Languages:

- Ruby websites, system scripts, everyday tasks
- Java mobile communication libraries
- PHP websites, database reporting scripts
- C/C++ modifications to Qualnet, classwork
- Python classwork

Operating Systems: Linux, Microsoft Windows, Android Applications: Qualnet, Git, Subversion

# EXPERIENCE

Graduate Student Researcher

July 2007 - Present

UCLA, Mobile Systems Lab, Los Angeles, CA

- Researching application development for mobile ad-hoc networks, focusing on the challenges of mobility and the wireless channel
- Published research surveying the current state of programming in mobile networks
- Performed quantitative study of mobile networks and routing protocols using Qualnet
- Responsible for managing lab computer network, servers, and resources

Information Security Intern

June 2010 - August 2010

AT&T Interactive, Glendale, CA

- Developed a static analysis security vulnerability scanner for Ruby on Rails applications
- Used this tool to discover and investigate vulnerabilities in both internal and external applications

Consultant

November 2008 - November 2009

Irell & Manella LLP

on behalf of Wisconson Alumni Research Foundation, Los Angeles, CA

- Analyzed published papers and theses related to processor design, especially those involving branching and data prediction
- Compared prior art to patent claims concerning data load prediction in processors capable of executing instructions out of order

PC Club, Los Angeles, CA

- Software and hardware troubleshooting and repair of customer desktops
- Provided customer service in-store and over the phone
- Built custom desktops for customer orders
- Recommended and sold computer parts and accessories to customers

System Administrator

May 2005 - March 2007

Klir Technologies, Seattle, WA

- Responsible for all desktops, laptops, office servers, backup, and VoIP systems
- Managed user, email, and phone accounts, as well as office software
- Designed and implemented the public-facing company website in PHP and HTML
- Developed reporting tools for the financial department using PHP and MySQL

Helpdesk Specialist

November 2002 - June 2005

Seattle University School of Law, Seattle, WA

- Troubleshooting of software and hardware issues for staff, faculty and student computers. Provided classroom technology support
- Performed parts replacements on desktops and laptops, including motherboards and processors
- Developed new internal ticketing system using Ruby and MySQL for tracking help tickets, laptops, and part orders
- Received special recognition from the dean for excellent customer service

PUBLICATIONS "A Quantitative Comparison of Communication Paradigms for MANETs." Justin Collins and Rajive Bagrodia. To appear in Proc. of the 7th International ICST Conference on Mobile and Ubiquitous Systems (Mobiquitous 2010)

> "Programming in Mobile Ad Hoc Networks." Justin Collins and Rajive Bagrodia. Proc. of the Fourth International Wireless Internet Conference (WICON 2008)

> "Greedy transformation of evolutionary algorithm search spaces for scheduling problems." David Joslin and Justin Collins. IEEE Congress on Evolutionary Computation (CEC 2007)

> "Improving genetic algorithm performance with intelligent mappings from chromosomes to solutions." Justin Collins and David Joslin. Proc. of the 8th Annual Conference on Genetic and Evolutionary Computation (GECCO 2006)

EXTRA-CURRICULAR ACTIVITIES

Open source projects: github.com/presidentbeef

President, Computer Science Graduate Student Committee, UCLA, 2010-2011

President, Seattle University ACM, 2005-2006