KIARASH DERRICK RAHBAR

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EDUCATION

Bachelor of Science in Engineering, Computer Systems Engineering

GPA 3.88

Barrett, The Honors College, Ira A. Fulton Engineering, Arizona State University, Tempe, AZ

• Selected Coursework:

Computer Networks, Design and Analysis of Algorithms, Scientific Computing, Algorithms and Data Structures, Design and Synthesis of Digital Hardware

EXPERIENCE

Intel Corporation (Santa Clara) Software Engineering Intern

May 2013 - August 2013

C/C++ and Fortran Compiler Optimization

- Designed/Implemented automated testing suite to compile, run, and benchmark bootup statistics of the Intel smartphone Operating Systems
- Used Intel C/C++ compiler to apply various optimizations on Linux Kernels
- Bench marked Intel C/C++ compiler's implementation of OpenMP 's SIMD directives

Center for Cognitive Ubiquitous Computing Research Assistant

September 2011 - June 2013

- Research focuses on physiological sensing and monitoring of children
- Designed/implemented Bio-sensing Suit for tracking physiological changes both in real time and wirelessly
- Implemented four sensors (ECG, GSR, pulse rate and temperature) onto a shirt which all communicate with a central processor embedded on the shirt

Algorithms, Combinatorics and Optimization Lab Research Assistant

August 2013 - Present

- Designed an Ad-hoc multi-hop wireless network algorithm for under water communication between sensors
- Implementing algorithm on multiple MSP430 microcontrollers acting as a wireless sensor network
- Currently working on a protocol for efficient and reliable communication at the Physical and Data Link layers

PROJECTS

Blogger Web Scraper

- Wrote a web scraper in Python to constantly scrape the most recently posted images in Blogger
- Used obtained data to rank Blogger activity geographically
- Used Beautiful Soup and urlib2

Imgur Scraper/Identifier

- Designed and trained an algorithm to classify images into 3 categories, People, Landscapes and Misc
- Scraped random images from Imgur.com to obtain large data set to train algorithm on
- Used Beautiful Soup and Requests and Python Imaging Library

TECHNICAL PROFICIENCIES

Programming/Scripting Languages

• C/C++, Python, Bash, Verilog, Java, Arduino C, SQL, MIPS

Software Tools/Frameworks

MATLAB, LaTeX, Microsoft WHK, Wireshark, Internet Protocol Suite (TCP/IP), Git, SVN, GDB, DDD, Xilinx

Operating Systems

- Linux Fedora, Slackware, Ubuntu
- Apple OSX

AWARDS

FURI (Fulton Undergraduate Research Initiative) Participant Dean's List, 2011 to Present ASU Presidential Scholar