Bennett Rand

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EDUCATION

OREGON STATE UNIVERSITY

B.S. Computer Science
June 2014 | Corvallis, OR
Applied Computer Science Program
School of Electrical Engineering and Computer Science
Major GPA: 3.32 / 4.0

LINKS

Github:// **BennettRand**
LinkedIn:// **Bennett Rand**

COURSEWORK

UNDERGRADUATE

- Computer Arch. and Assembly Lang.
- Operating Systems I & II
- Software Engineering I & II
- ST/ HCI Research Methods
- Digital Logic Design
- Intro to Usability Engineering
- Computer Org. & Assembly Lang.
- Intro Artificial Intelligence
- ST/ Intro to Info Visualization
- Computer Architecture
- Applied Robotics
- Machine Learning & Data Mining
- Intro to Parallel Computing
- Network Security
- Mobile/Cloud Software Development

SKILLS

LANGUAGES

Strong:
Python • C • C++ • JavaScript
Assembly (AVR, x86, ARM v6) • SQL
HTML • CSS
Familiar:
C# • PHP • Java • Go

OTHER

MySQL • PostgreSQL • Python NDB
Microsoft .NET • Google App Engine
Windows • Linux • Solaris
802.15.4 • WebSockets • Cassandra

PROJECTS

DR. WATTSON | Senior Capstone Project (Award-Winning)

Fall 2013 - Spring 2014 | http://goo.gl/PqPYvQ
Designed and built a mesh network of power monitors to measure home power usage patterns and help people conserve energy.

SAMPLIFY | A Python Library for Physical Measurements

2016 | https://github.com/BennettRand/Samplify
A library to keep track of magnitude and unit-aware measurements. The purpose is to simplify the manipulation of physical quantities and ensure incompatible units are not confused with each other.

EXPERIENCE

SOLARCITY | Embedded Software Engineer

Fall 2014 - August 2016 | San Mateo, CA
I maintained and added new features to a Python application that ran on small, Linux-powered, embedded devices. The application communicated to various power appliances in order to send power data samples back to a database and a realtime messaging system. It also controlled various settings on the appliance when commanded over the realtime messaging system.
I also spearheaded the effort to get the Python application's build process off of developers' computers and into continuous integration with unit testing as well as move away from using a SQL-based logging system to using a third-party log management stack.

Technology Used:

ZigBee (802.15.4)	TCP/IP	MODBUS	RS-485
Websockets	RabbitMQ	Cassandra	Flask
MSSQL	Jenkins CI	ELK	Git

OREGON STATE UNIVERSITY EECS | Undergraduate TA

Spring 2012 – Spring 2014 | Corvallis, OR
I ran lab sections, graded exams, held office hours, held assignment demonstrations, and graded assignments for multiple classes.

- Operating Systems II (1 Quarter): Mr. D. Kevin McGrath
- Computer Arch. and Assembly Language (1 Quarter): Mr. D. Kevin McGrath
- Operating Systems I (3 Quarters): Mr. D. Kevin McGrath
- Intro to Computer Science II (6 Quarters): Mr. Donald Heer, Mr. D. Kevin McGrath, Dr. Jennifer Parham-Mocello, and Dr. Weng-Keen Wong

AWARDS

2014	Second Place	Engineering Expo. Industry Award, Oregon State University
2014	Honorable Mention	Cornell Cup USA, Presented by Intel
2013	Finalist	Cornell Cup USA, Presented by Intel
2009	Regional Winner	FIRST Robotics Competition, Silicon Valley Regional

REFERENCES AVAILABLE UPON REQUEST.