Max Knutsen

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Job Skills

programming languages
C, C++, Python, Java

knowledge areas
UEFI app/driver development

Windows driver development

version control
git, mercurial, subversion, cvs

Education

University of Maryland, Baltimore County

B.S. Computer Science, 2016

GPA 3.3

Coursework
Operating Systems

Computer Architecture

Artificial Intelligence

Robotics

Leadership

Retreiver Robotics
Founding member (2013)

Lead programmer (2013-15)

Treasurer (2014)

Programming mentor (2013-16)

Experience

Software Engineer I - Core UEFI
Microsoft Redmond, WA | Aug, 2017 - Present
Wrote SMM driver, UEFI app, and runtime Python application to facilitate open source investigation of new feature.

Software Engineer I - Hyper-V
Microsoft Redmond, WA | Feb - Aug 2017
Exposed memory management features to server engineers through new driver level API and accompanying Python script.

Software Engineer Intern - BLOB Storage
Facebook Mountain View, CA | May - Aug 2016
Implemented caching mechanism to avoid initial twenty minute setup, increasing the availability of the Namenode service.

Architected test layer to distributed server to test fallback in a production environment, which was used to discover errors in redundancy systems.

Jr. Software Engineer Intern
Cougaar Software Tysons Corner, VA | 2014 - 2016
Designed goal-oriented distributed robotics framework.
Built robot which could balance water tanks with an introduced leak.

Projects

Distributed Systems
Java | 2016
Used Twitter garden hose with Avro, Kafka, Storm, Redis to track trending hashtags in real time.

Water Rescue Robot
Python | 2016
Used ROS to program modified water-resistant AR.Drone to land near objects in the water.

Real Time Video Game AI
Java | 2016
Built artificial intelligence that used modular action sequences to respond to stimuli in real time.