Max Knutsen

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Microsoft — Core UEFI Firmware Engineer work

Aug 2017 -

Facilitated core UEFI support for the release of Windows for an IOT board Modernized Python build tools for broader use in the open source community Designed and implemented individual driver update scenarios to improve serviceability Provided tools to capture and analyze security status of a host machine during runtime Developed functional tests to verify the functionality of UEFI memory protections

Microsoft — Hyper-V Software Engineer

Feb - Aug 2017

Built an internal tool to reorganize a host system's memory layout at runtime Refactored the attack surface of a driver to create a clear layer of input validation

Facebook — BLOB Storage Intern

May - Aug 2016

Cut server start time by 99% by reading from cache, improving emergency response Created a testing environment to expose recovery issues in the distributed network

Cougaar Software — Robotics R&D Intern

2014 - 2016

Created distributed health monitoring system designed for modular hardware systems Used Cougaar's framework to design and construct a distributed robotics framework Built a robot that maintains a specified water level when a leak is introduced

projects

Retriever Robotics

2013 - 2016

Founding member, lead programmer, treasurer, and mentor on UMBC's VexU team

FloatBot

2015

Used ROS and Open CV to task an AR.Drone to find and save a drowning person

school

University of Maryland, Baltimore County

2016

Received a BS in Computer Science a 3.3 GPA