

Max Knutsen

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work **Amazon** — Embedded Firmware Engineer 2019 -

Contributed to firmware application development on the Alexa Loop

Microsoft — Core UEFI Firmware Engineer 2017 - 2019

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 boot

Developed functional tests to verify the functionality of UEFI memory protections

Microsoft — Hyper-V Software Engineer 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 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

school **University of Maryland, Baltimore County** 2016

Received a BS in Computer Science with a 3.3 GPA

Retriever Robotics 2013 - 2016

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