Max Knutsen

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work

Microsoft — UEFI Firmware Engineer
Aug 2017 -

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 UEFI shell tests to verify the functionality of 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

Distributed Systems with Hadoop
2016

Used Avro, Kafka, Storm, and Redis to categorize data from Twitter garden hose

FloatBot
2015

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

Real Time Artificial Intelligence
2015

Made a game with AI that reacts to movement using modular action sequences

school

University of Maryland, Baltimore County
2016

Received a BS in Computer Science a 3.3 GPA