

Max Knutsen

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work **Microsoft — Software Engineer** 2017 -

Designed and implemented UEFI drivers that are serviceable without full UEFI update, enabling partners to rapidly iterate during production, as well as provide the ability for Microsoft to update critical drivers in conjunction with major Windows updates.

Provided UEFI app, SMM driver, and Python script for a security assessment, enabling our team to provide partners with insights into the effects of new features

Facebook - Software Engineer Intern Summer 2016

Added a periodic file cache to Namenode servers to bypass the twenty minute start time, increasing response time in the case of sudden failures.

Designed infrastructure to test the fault tolerance for the suite of distributed BLOB storage systems by simulating unresponsiveness from one server in a production-like environment, forcing related servers in the ecosystem to adapt.

Cougaar Software - Jr Software Engineer Intern 2014 - 2016

Added health monitoring capabilities to Cougaar's distributed ActiveEdge network. The health monitoring system was designed to be highly flexible and scalable to monitor and react to the health of individual components in a physical robotic system.

Designed a distributed subsumption architecture and implemented it on a system with multiple water tanks that could manage water levels with an introduced leak.

projects **Drone Rescue** Fall 2015

Used ROS, Open CV, and duct tape to enable an AR.Drone to find an object in the water, fly towards it, and land near it.

Real Time Artificial Intelligence Spring 2015

Built shooting game with AI that responds by building modular action sequences depending on the play-style of the user.

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

BS in Computer Science with an emphasis on systems with 3.3 GPA