

Max Knutsen

mknutsen99@gmail.com | maxknutsen.com | 703.300.6216

work **Microsoft** — Software Engineer 2017 -

Provided UEFI app, SMM driver, and Python script for a security assessment

Built internal tool to reorganize a VM server memory layout at runtime

Refactored attack surface of a driver to create a clear layer of input validation

Facebook — SWE Intern Summer 2016

Cut Namenode start by 99% by reading from cache, improving emergency response

Migrated warm storage to more a durable, flexible dynamic configuration system

Created testing environment for hot storage to find error handling problems

Cougaar Software — SWE 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 balanced water levels in response to introduced leaks

projects **Distributed Systems with Hadoop** Spring 2016

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

FloatBot Fall 2015

Used ROS, Open CV, AR.Drone to build a drone that would save a drowning person

Real Time Artificial Intelligence Spring 2015

Built game with AI that reacts to movement using modular action sequences

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

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