

# Danny Kim

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## Education

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**University of Maryland**, College Park, MD

Ph.D. Computer Engineering

9/2014-12/2018

**University of Maryland**, College Park, MD

B.S. Electrical Engineering

**GPA: 3.76**

8/2010-5/2014

**Denmark Technical University**, Lyngby, Denmark

1/2013-6/2013

## Engineering Experience

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**University of Maryland**, College Park, MD

9/2014-Present

*Graduate Research Assistant*

- Researching an innovative method using static and dynamic program analysis to aid malicious software detection.
- Developing behavioral analysis tools with binary rewriters such as DynamoRIO in C++ to obtain instruction-level behavior from a program's execution
- Building a highly accurate machine learning-based malware detection tool with SciKit and TensorFlow.

**Microsoft**, Redmond, WA

6/2016-8/2016

*Windows Authentication Development Engineering Intern*

- Implemented a new security feature that allowed protected Windows processes to communicate with an unprotected process without compromising security.
- Developed new methods of authentication in collaboration with a multi-disciplinary team in order to ensure quality and customer satisfaction.
- Shipped a new security feature in the latest release of Windows.
- Maintained an aggressive timeline to meet the real-time needs of customers.

**Key Technologies**, Baltimore, MD

6/2014-8/2014

*Electrical Engineer*

- Developed and tested firmware written in C for a handheld medical device measuring blood glucose levels.
- Proposed the use of a Bluetooth chip as method of communication between the device and its controller.
- Collaborated with multiple disciplines on the design of a device to ensure the device met all the customer's standards.

**Microprocessor Project**, College Park, MD

9/2013-1/2014

*System Engineer*

- Utilized various programming languages to maximize efficacy in meeting project requirements.
- Used the STM32 ARM processor to create a volt-meter that communicated data to a computer using UART.
- Created a reference manual that documented the different aspects of the project and the design considerations.

**iVeia**, Annapolis, MD

6/2013-1/2014

*Consulting Engineering Intern*

- Built a python-based GUI that installed platform specific debian packages on customers' computers.
- Implemented new internal tools that integrated Bash and Python scripts that automated the generation of release notes and sped up product build time.
- Gathered data on filesystems' performance by running intensive IO scripts and recommended the highest performing.

## Leadership Experience

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**University of Maryland**, College Park, MD

9/2014-12/2014

*Graduate Teaching Assistant, Computer Organization*

- Led weekly discussion classes of 20 students reinforcing topics taught in lecture.
- Met with the Professor and other GTAs for quality checks and status reports.

**University of Maryland**, College Park, MD

8/2015-5/2016

*ECE Graduate Student Association Vice-President*

- Created and planned events for the ECE department graduate students to facilitate multi-disciplinary collaboration.

## Skills

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### Programming:

- Proficiency with C, Bash
- Familiarity with C++, Python, Matlab, Verilog, Assembly, Git, Virtuoso, Makefiles