

# John J. Seymour, III

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<https://github.com/seymour1/>

[sites.google.com/site/jjseymour3](https://sites.google.com/site/jjseymour3)  
<https://www.kaggle.com/seymour1>

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## RESEARCH INTERESTS

Malware Analysis, Machine Learning, Quantum Computing

## EDUCATION

### University of Maryland, Baltimore County (UMBC)

Ph.D. in Computer Science (Expected Spring 2017)

*For list of publications, see <https://sites.google.com/site/jjseymour3/publications>*

Graduate GPA: 4.0/4.0

M.S. in Computer Science (Fall 2014)

Thesis Title: Quantum Classification of Malware

**Presented at DEFCON23, Summer 2015**

B.S. *cum laude* in Computer Science (Fall 2011)

B.S. *cum laude* in Mathematics (Fall 2011)

B.A. *cum laude* in Philosophy (Fall 2011)

Certificate of General Honors

Undergraduate GPA: 3.70/4.00

## WORK EXPERIENCE

### CyberPoint International, LLC

*Student Intern*, Summer 2015 - Present

- Created multiple Java programs with various algorithms and data structures for use in the DARPA Space/Time Analysis for Cybersecurity project.
- Recreated the top Kaggle Malware Competition models and added multiple machine learning algorithms to the CyberPoint Machine Learning Model Training Pipeline.

### Army Research Lab

*Student Intern*, Summer 2014

- Researched skew in the D-Wave SR10V6 using satisfiability problems.
- Demonstrated and reduced bias in D-Wave chips using statistical techniques.

### University of Maryland, Baltimore County

*Graduate Research Assistant, UMBC DREAM Lab*, January 2014 - May 2015

- Created Bash Scripts and Cron jobs to scrape urlquery.net for links to websites redirecting to exploit kits.
- Integrated VirtualBox, Wireshark, Bash and Python scripts, and Suricata to intercept and record all traffic to exploit kit landing pages.
- Published multiple papers on Exploit Kit classification and overgeneralization in malware classification.

*Graduate Teaching Assistant*, August 2012 - December 2013

- Teaching Assistant for Network Security, Computer Security, Cryptography, Automata Theory, and Introduction to Object-Oriented Programming.
- Introduced students to Metasploit/Kali Linux and theoretical aspects of cybersecurity.

*Graduate Research Assistant, UMBC Cyber Defense Lab*, January 2012 - August 2013

- Designed, tested, deployed, and maintained the SecurityEmpire website and game.
- Administered Mercurial repository, managed Red Hat server with Apache HTTPD to host project, and developed server-side code using PHP and MySQL.
- Managed undergraduate graphic designers and programmers and assisted with HTML, CSS, and Javascript with AJAX.

### Pyxis Engineering/Applied Signals Technology

*Associate Engineer*, June 2009 - January 2010

- Designed, tested, and deployed a Training Request Management System using Java, Spring, HTML, CSS, Javascript, JUnit, MySQL, Apache Maven, and Apache Tomcat.