John J. Seymour, III

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Research Interests: Machine Learning, Malware Analysis

Work Experience

ZeroFOX, Inc

Senior Data Scientist, September 2016 - Present

- Piloted ZeroFOX FoxThreats program for threat hunting on social media.
- Interviewed and mentored new hires.

Data Scientist, September 2015 - September 2016

- Led development of SNAP_R, a pen-testing tool using machine learning to automate generation of individually tailored phishing messages on social media. (covered by The Atlantic and Forbes)
- Developed solution to detect money-flipping scam posts on Instagram. (covered by BBC Tech)
- Created high-quality datasets for product offerings using Mechanical Turk/Amazon S3.
- Conveyed complex ML concepts to press, conference attendees, and customers/potentials.

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.

Graduate Teaching Assistant, August 2012 - December 2013

- Teaching Assistant for Network Security, Computer Security, Cryptography, Automata Theory, and Introduction to Object-Oriented Programming.
- Taught Metasploit, Kali Linux, and infosec theory to undergraduates.

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

- Designed, tested, deployed, and maintained LAMP stack to host government-funded gamification initiative for teaching high school students basic concepts in infosec.

Education

University of Maryland, Baltimore County (UMBC)

Ph.D. in Computer Science (Expected Fall 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