

Gregory Simon Bekher

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EDUCATION

University of Maryland, College Park, MD

- Bachelor of Science (B.S.) in Computer Science Aug 2014 – Present
 - GPA: 3.81
 - Department of Computer Science Honors Program
 - Honors College, Advanced Cybersecurity Experience for Students (ACES) Program
 - Minor in Russian Studies

WORK EXPERIENCE

Department of Computer Science, University of Maryland

Teaching Assistant for CMSC330: Organization of Programming Languages Fall 2016

Tenable Network Security, Columbia, MD

Software Engineer Intern, Passive Vulnerability Scanner (PVS) Core Team Summer 2016

- Increased PVS engine realtime packet processing speed by 35% by designing, implementing, and testing an optimized plugin evaluation algorithm in C.
- Created a classifier with SKLearn to label network flows by category; model yielded 98% test accuracy.
- Developed and tested a benchmarking suite to locate bottlenecks in PVS data structures.

Northrop Grumman Information Systems, Annapolis Junction, MD

Software Engineer Intern, APPIA & CSAWS Platforms Jun 2015 – Apr 2016

- Developed an IRC bot for the APPIA REST API in Ruby; created automation scripts in Python.
- Contributed web UI enhancements and Java JBoss backend security patches and bugfixes for both platforms.

Systems Engineer Intern, Cyber Security Operations Center (CSOC) Jun 2012 – May 2015

- Wrote LDAP aggregation infrastructure for >80k users, currently deployed on CSOC production servers.
- Saved analysts >5 work hrs/week with a workflow automation tool. Created automation scripts in Python.

RESEARCH EXPERIENCE

Software Engineering at Maryland (SEAM), Dr. James Putilo, University of Maryland

Project Lead, Dynamic Reconfiguration via Live Application Migration Jan 2015 – Jun 2016

- Designed reconfiguration bus architecture with Docker hooks, developed RESTful web API in Python.

NOTABLE PROJECTS

- Parapit Community Platform 2016
 - Threat sharing and communication platform for information security professionals. See parapit.com.
 - Scalable web platform and info feed designed in NodeJS, ReactJS, and Redux using MongoDB & Redis. Unstructured text classification and processing developed with the Python NLTK framework.
- Synesthesia Music Processing Tool, NodeJS+React App Apr 2016
- CheckSnap Restaurant Receipt Parser, iOS App 2015

SKILLS & LANGUAGES

- Proficient: C, Python, JavaScript ES5 & ES6, Java, BASH, Ruby, OCaml
- Experience With: Swift, Objective-C, Scheme, Prolog, x86 Assembly Flavors, MATLAB, \LaTeX
- Frameworks: ReactJS, Redux, NodeJS, iOS SDK, SKLearn, NLTK, GTest, Linux Kernel Libs

CAMPUS ACTIVITIES

- President, ACES Honors Program Student Board May 2015 – May 2016
- Recruitment Ambassador, College of Math and Natural Sciences Mar 2016 – Present
- Member, UMD Startup Shell Incubator Mar 2016 – Present

ACADEMIC AWARDS

- Corporate Partners in Computing Scholarship, University of Maryland 2016
- Gannon Portal Scholarship, Computer Science Dept., University of Maryland 2015
- Senate Scholarship, State of Maryland 2014 – 2016
- Dean's List, Fall 2014 through Spring 2016, University of Maryland 2014 – 2016

COURSEWORK

- Undergraduate: Machine Learning, Programming Language Paradigms, Computer Architecture, Organization of Programming Languages, Reverse Engineering, Linear Algebra