Jacob A Cohen

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Languages
Python, Java, C, Bash, SQL, R, Ruby, OCaml, Racket, Rust, & Latex

Environments
Unix/Linux (Bash, Zsh)
MacOS
Windows

Tools
Git
Docker
Ghidra
VIM
JetBrains IDEs
Hadoop
Wireshark
Elastic Stack
Geomatica Focus
ArcGIS

Coursework
Computer & Network Security
Applied Reverse Engineering
Cryptography
Computer Systems Architecture
Data Structures
Compilers
Programming Language Technologies & Paradigms
Wireless Communication & Software-Defined Radio

Certifications
Cisco CCENT
CompTIA A+

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Eligible for Top Secret/SCI Clearance

Education

B.S. in Computer Science - Cybersecurity Concentration **Graduation: May 2020**
University of Maryland - College Park College Park, Maryland
Minors: Advanced Cybersecurity Experience for Students (ACES) & Geographic Information Science (GIS)
Honors College & Scholars (Science, Technology, Society) Programs
GPA: 3.56

Work Experience

High Performance Computing Intern **2016-Present**
Army Research Laboratory Aberdeen Proving Grounds, Maryland

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Developed, scaled, and implemented various data collection components used for system analytic data collection on High Performance Computing (HPC) systems. Solutions developed provide tracking of research application licenses and system/node resource usage data through use of Python, MySQL, Facebook's Osquery, the Elastic Stack, and more.

Programming Experience

• Dwyer M., Hwang J., Shires A., **Cohen J.**, "Application of Comprehensive Data Analysis for Interactive, Hierarchical Views of HPC Workloads" In *2018 IEEE International Conference on Big Data (Big Data)* (pp. 3585-3589). IEEE. 2018

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Defined and implemented Extract, Transform, Load (ETL) data collection framework for use on High Performance Computing (HPC) systems. Framework incorporates use of Facebook's Osquery to harvest system data and the Elastic Stack to ship, transform, store, and manipulate data at an HPC scale.

• DNS Prefetching Research Project 2019

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Collaborated on techniques for web scraping the Alexa top 10,000 websites via Python's BeautifulSoup library to get usage statistics on implementation of DNS Prefetching.

Extracurriculars

• NSA Codebreakers Challenge Participant 2019
• Bitcamp Hackathon Participant 17', 18', 19'
• Coordinator/Volunteer - Terps 4 Change at A Wider Circle and TerpFarm 2019-Present
• Team Challenge Participant at Cyberskylines Competition 2017

Awards

• Dean's List for Computer Science Fall 16', 18', 19' & Spring 18', 19'
• DoD SMART Scholarship Awardee Fall 2018–Present
• Armed Forces Communications & Electronics Association Scholarship 2016–Present