

# Jacob A Cohen

Computer Science | Data Engineering | System Analytics | Cybersecurity

## contact

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 (443) 903-0331

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Eligible for Top Secret/SCI Clearance

## programming

Python, SQL, R, Java, C, Bash, Ruby, OCaml, Rust, & LaTeX

## environments

Unix/Linux (Bash, Zsh), Windows, MacOS

## tools

Git, Docker, VIM, JetBrains IDEs, Hadoop, Slurm, Wireshark, Elastic Stack, Geomatica Focus, ArcGIS

## certifications

Cisco CCENT  
CompTIA A+

## coursework

Computer & Network Security  
Applied Reverse Engineering  
Cryptography  
Computer Systems Architecture  
Data Structures  
Programming Language Technologies & Paradigms  
Wireless Communication & Software-Defined Radio  
Quantitative Methods  
Remote Sensing  
GIS

## work experience

### Army Research Laboratory - Supercomputing Center

2016–Present | Aberdeen Proving Grounds, Maryland

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Developed and implemented a variety of data collection components used for system 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 Regular Expressions, Python, MySQL, Facebook's Osquery, the Elastic Stack, and more.

## education

### B.S. in Computer Science - Cybersecurity Concentration

2016–2020 (Anticipated Graduation: May 2020) | University of Maryland - College Park

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*Minors:* Advanced Cybersecurity Experience for Students (ACES) & Geographic Information Science (GIS)

Honors College & Scholars (Science, Technology, Society) Programs

GPA: 3.56

## publications

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.

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Defined and implemented Extract, Transform, Load (ELT) 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.

## extracurriculars

NSA Codebreakers Challenge Participant	2019
DNS Prefetching Research Project	2019
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.	
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