

**TECHNICAL SKILLS**

- Computer Languages: Python, Java, SQL, C, C++, Golang, R, Bash, Git
- Analytic Skills: Splunk, Tableau, ELK Stack, BigQuery, PowerBI, Office365, Agile Methodology
- Analysis and ETL of large databases using Python, SQL, and R
- Operating Systems and Cloud Technologies: Windows, Debian GNU/Linux, Mac, AWS EC2

**WORK EXPERIENCE****PayPal, Enterprise Cybersecurity**

San Diego, CA

**Technical Product Manager**

Aug 2021 – Mar 2023

- Reduced P0/P1 incidents by 20% by integrating three new Vulnerability Scanning tools with BigQuery and PowerBI, and validating their efficacy with engineers through collaboratively creating an RFI and conducting POCs
- Led the migration of data from Splunk to BigQuery organizing asset information, scoping usage of storage and fees, and integrating our current queries for vulnerability dashboards with a reduction of \$3.4M
- Designed and approved by executive leadership a new Container Security Lifecycle reducing redundant capabilities, maintaining compliance standards, and decreasing our budget by over \$3.5M
- Led the Innovation Team for 3 quarters delivering a Chrome Plug-in to improve role request for IAM services and developed Python scripts to increase API security

**AT&T, Chief Security Office**

Columbia, MD

**Software Engineer, Lead**

Jan 2020 – Aug 2021

- My group worked to identify and classify persistent cybersecurity threats. Responsible for managing and developing various front-end and back-end tools to efficiently capture, filter, and display real-time network information
- Created Python module to streamline SQL database generation and table modifications utilized by all backend developers for ETL tasks aiding in our project to visualize a continuous flow of hourly network information
- Designed custom Python modules utilizing multiprocessing and generators to identify malicious TCP/IP interactions in terabytes of network data. Leveraged contour plots and benchmark testing for efficient CPU allocation reducing resources >80%
- Increased search algorithm efficiency by 15% through implementation of a Golang hash table for Internet Protocol filtering, as validated by a benchmark testing script
- Developed parsing methods using C for Internet Packet information to be parsed and translated into human readable format, and subsequently input into a data structure allowing other developers to use this information for data analysis with an ICMP tool
- Implemented system and unit testing platforms allowing developers to validate the functionality of their code against tests on our drone server before being sent to the internal git website

**Software Product Manager**

- Generated specifications and relayed requirements to Project Managers and Technical Leads to deploy multiple command line tools. Effective communication resulted in projects that exceeded benchmark requirements and completed two months early
- Managed development of a web-based visualization tool to detect threats by analyzing over twenty petabytes of network data. Worked with Technology Leads to satisfy customer requests and assist in development and organization of the ETL process

**Software Mentor**

- Taught and created interactive Cybersecurity lessons about nmap and other Cyber Security scanning tools as a mentor to a local high school for the AFA CyberPatriot Program
- Created a learning path in Intermediate Python topics allowing colleagues to learn about Python or improve their skills. Transitioned 3 developers into backend engineering projects after completion of this learning path.

**Laboratory for Pathogenesis of Clinical Drug Resistance and Persistence**

San Diego, CA

**Data Scientist**

July 2018 – Jan 2020

- Used caret and e1071 to create random forests and support vector machines in R along with linear regression and other machine learning methods to predict the status of unknown bases using surrounding methylation information
- Designed a Python based tool comparing genomic regions to a database to predict the global origin with two students

**EDUCATION****Master of Science in Computer Science***Georgia Institute of Technology*

May 2024

**Master of Science in Data Science***San Diego State University*

May 2021

Selected Coursework: Data Structures, Machine Learning, Operating Systems,

Statistical Analysis, Methods in Bioinformatics, Discrete Mathematics

**Bachelor of Science in Biochemistry***Baylor University*

May 2018

**Intermediate Python***Udacity*

May 2021