

## Education

### The University of Texas at Austin, 05/2024

- B.S. Computer Science, concentration in Cybersecurity
- GPA: 3.41/4.0

## Skills/Relevant Coursework

**Dev:** Java, C/C++, Python, JavaScript, HTML/CSS

**Technologies:** React.js, Node.js, Linux, Git, Jupyter Notebook, MySQL

**Coursework:** Data Structures & Algorithms, Operating Systems, Web-Applications, Ethical Hacking, OOP, ML

**Cybersecurity Tools:** Metasploitable, Kali Linux, Ghridra, Burp Suite

## Work Experience

### Dun & Bradstreet

Austin, Texas

#### Security Engineering Intern

Jun. 2023—Aug. 2023

- Created playbooks in XSOAR, troubleshot Splunk and Google Chronicle scripts.
- Used MySQL to audit and analyze over 12,000 CrowdStrike hostnames.
- Reviewed HTTP requests in Burp Suite, resolved internal SOC tickets.
- Project: Implemented and trained a text multiclassification ML model using Doc2Vec with an accuracy of 70% on a relatively tiny dataset (200 samples) using Jupyter Notebook.

### UT Liberal Arts Instructional Technology Services (LAITS)

Austin, Texas

#### Student Systems Developer

Jan. 2022—May 2023

- Assisted in developing a full stack in-house system monitoring software to replace existing service (Nagios).
- Implemented an admin dashboard using React including live charts, tables, session management, etc.
- Wrote scripts to query and load live monitoring data from over 200 systems.
- Used PHP and MySQL under the Laravel framework to implement a REST API along with authentication control, authorization, and secure access tokens.

### Intelligent Environments Laboratory – UT Austin

Austin, Texas

#### Undergraduate Research Assistant

May 2021—Aug. 2021

- Integrated the STRAVA dataset into the IEL COVID-19 data analysis dashboard using Python.
- Trained various supervised and unsupervised ML algorithms on over 20 unique datasets in Jupyter Notebook.

### L3Harris Technologies

Arlington, Texas

#### Software Engineering Intern

Aug. 2019—Mar. 2020

- Debugged the NGTS unclassified simulation environment in C++ and updated API documentation.
- Wrote scripts to automate testing process for NGTS, reducing downtime between unit tests by 40%.
- Performed market research for unit testing frameworks and presented findings to software engineers.

## Projects

- **CS378 Ethical Hacking** – Explored network protocols, browser safety, HTTP & SSH encryption protocols. Applied these principles to write backdoor scripts, perform XSS attacks, SQL injections, exploit CORS and similar web vulnerabilities in PortSwigger. Reverse-engineered binaries using Ghidra.
- **CS439 Operating Systems** – implemented multi-threading & synchronization, system calls, virtual memory, and file systems of the PintOS operating system in C.
- **CS378 Web Applications** – used Flask & SQLAlchemy to develop a minimal full-stack web app. Implemented session management, Google OAuth, ETL, and deployed on AWS. Applied REST API design principles.
- **Web Scraper Discord Bot** – paid service that allows users to request web content in HTML format. Provided service to over 200 monthly users for 6 months.
- **RoboBoat Competition: Computer Vision** – trained a neural network on the YOLOv3 algorithm to detect and label buoys using over 900 hand-labeled pictures, implemented using OpenCV.