

## Education

### B.S.E. in Computer Science

2020 – 2024

Princeton University, GPA 3.85

- Relevant courses: Information Security, Computer Architecture (Fall 2023), Advanced Programming Techniques, Economics and Computing, Reasoning About Computation, Introduction to Programming Systems, Data Structures and Algorithms, Introduction to Data Science, Linear Algebra, Multivariable Calculus
- Minor in music (vocal performance)
- Activities: Chamber Choir, COS 226/217 Teaching Assistant, D1 Women's Rugby Team (2021-2023)

## Work Experience

### Offensive Security Research Intern

June 2023 - August 2023

Intel Corporation

- Designed novel approaches for performing bug deduplication after fuzzing campaigns
- Performed a literature review of deduplication techniques and pitched a new approach to my team
- Coded two proof-of-concept C programs to demonstrate limitations of existing methods
- Presented contributions to the Intel Product Assurance & Security team
- Wrote thorough documentation to ensure my work can be reproduced and expanded in the future

### COS 226 / 217 Teaching Assistant

September 2022 – April 2023

Princeton Department of Computer Science

- Guided students through debugging programming assignments for COS 226 (Data Structures and Algorithms) and COS 217 (Introduction to Programming Systems)
- Reviewed code in Java, C, and ARM assembly language

### Full Stack Developer

September 2022 – January 2023

Independent Project - TackleMate

- Developed a web app to provide personalized feedback on user-inputted videos of rugby tackling drills
- Used Google's MoveNet Lightning pose estimation model to detect locations of body keypoints
- Evaluated literature on common characteristics of unsafe tackles to select areas for feedback: tackle height, acceleration into contact, and arm wrapping

### Undergraduate Researcher

June 2022 - July 2022

Princeton-Intel Research Experience

- Researched adversarial patches, stickers which can be applied to images or real-world objects to cause misclassification when fed to image recognition models
- Began developing a framework which does not rely on a particular model architecture or knowledge of the patch size to defend against adversarial patches

## Technical Skills

Beginner • Intermediate • Advanced

C

Git

Wireshark

HTML / CSS

SQL

Java

AFL++ Fuzzing

ARM Assembly

JavaScript

MATLAB

Python

Bash

Computer Forensics

Flask

R

## Awards and Certifications

(Estimated completion October 2023)

Profiles in Intellectual Generosity

Studying for CompTIA Security+ Certification

McGraw Center for Teaching and Learning, Princeton University