

Education

B.S.E. in Computer Science

2020 – 2024

Princeton University, GPA 3.85

- Relevant courses: Information Security, Computer Architecture and Organization, Principles of Computer System Design, Advanced Programming Techniques, Economics and Computing, Introduction to Programming Systems, Data Structures and Algorithms, Introduction to Data Science, Linear Algebra, Multivariable Calculus
- Minor in music (vocal performance)
- Activities: OrangeHat Cybersecurity Collective (co-founder), Chamber Choir, Varsity 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 Research Project - TackleMate

- Developed a Flask 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

Go

MIPS Architecture

Flask

HTML / CSS

Java

Git & GitHub

ARM Architecture

JavaScript

MATLAB

Python

AFL++ Fuzzing

Wireshark

SQL

R

Awards and Certifications

(Estimated completion January 2024)

Profiles in Intellectual Generosity

Studying for CompTIA Security+ Certification

McGraw Center for Teaching and Learning, Princeton University