

John Wilkinson

Work Experience:

MongoDB, New York, NY | *Cryptography Research Intern*

June 2024 - August 2024

- Implemented Data Structure Emulation for the ste++ library for flexible prototyping of cryptographic schemes
- Prototyped and benchmarked pi_base structured encryption, Path ORAM, and recursive Path ORAM using ste++

Brown University, Providence, RI | *Head Teaching Assistant*

October 2023 - May 2024

- Interviewed and hired 60+ undergraduate teaching assistants for CS200: Data Structures and Algorithms (Spring 2024)
- Redesign two major projects, including a graph theory project and a search algorithm project
- Coordinate logistics for class of 450+ students

Brown University, Providence, RI | *Teaching Assistant*

January 2023 - May 2023, August 2023 - December 2023

- Lead lessons for CS200: Data Structures and Algorithms with lab groups of 30+ university students
- Grade 10+ student projects per week on implementation and understanding

Tigro Project, remote | *Software Engineer Intern*

May 2023 - May 2024

- Implemented Android mobile app for an encrypted communication protocol research project
- Integrate Diffie-Hellman key exchange and communication with an encrypted dictionary

PathAI, Boston, MA | *Data Science Intern*

September 2022 - November 2022

- Developed an interactive dashboard to visualize the performance of multiple AI models used for biopsy analysis
- Built a data pipeline to prepare raw data for our dashboard

Projects:

Autonomous Aerial Drone, CS1951R - Robotics

September 2023

A quadcopter drone capable of autonomous flight, equipped with an onboard camera, ToF sensor, and PID flight controller.

- Soldered and assembled drone components
- Implemented autonomous flight in ROS, including stable flight and landmark navigation via camera

Clubs and Leadership:

Brown Poker Club, Brown | *Secretary, Competition Team*

July 2021 - Present

- Won the 42-team Citadel IPA poker tournament
- Led development of the club website

TEDxBrownU, Brown | *Head of Tech and Web*

April 2023 - May 2024

- Lead meetings and set goals for team of six developers and designers
- Coordinate user studies and ensure design complies with TEDx standards

781-742-3007

john_wilkinson@brown.edu

linkedin.com/in/john-wilkinson2025

github.com/wilkyrlx

Education:

Brown University, Providence, RI

September 2021 - Expected May 2025

GPA: 4.0

Major: Computer Science

Minor: Archaeology

Roxbury Latin, West Roxbury, MA

August 2015 - June 2021

Magna Cum Laude, Varsity Wrestling,

Model UN President, Debate VP

Selected Coursework

CS200 - Data Structures and Algorithms

CS1270 - Database Management Systems

CS1515 - Applied Cryptography

CS1800 - Cybersecurity and International Relations

CS1650 - Security and Exploitation

CS1470 - Deep Learning

CS1430 - Computer Vision

CS1951R - Robotics

CS32 - Software Engineering

CS300 - Fundamentals of Computer Systems

CS17 - Functional Programming

CS22 - Discrete Structures and Probability

ENGN500 - Digital Computing Systems

MATH100 - Calculus II

MATH520 - Linear Algebra

APMA1650 - Statistical Inference

Skills:

Development

C++, Typescript, Python, Javascript, Kotlin, Java, C, Go, HTML, CSS, ReasonML, Lean

Tools

Git, Github, NodeJs, MongoDB, Firebase, Google Cloud Run, ROS, Protobuf, Unity, Blender, OnShape, Altium, Excel, Powerpoint

Interests

Windsurfing, sailing, lockpicking, archaeology, woodworking