

Tuneer Roy

tuneer@seas.upenn.edu • (615) 947-3426 • tuneer-roy.com • github.com/tuneerroy

EDUCATION

University of Pennsylvania

Philadelphia, PA

Bachelor of Science in Engineering, Computer Science; GPA: 4.0/4.0

Expected May 2024

Coursework: Programming Languages and Techniques I & II; Automata, Computability, and Complexity; Introduction to Computer Systems; Artificial Intelligence; Multivariable Calculus; Linear Algebra

Montgomery Bell Academy

Nashville, TN

High School Diploma; GPA: weighted – 5.21/5.25, unweighted – 4.0/4.0

May 2021

Honors & Achievements: National Merit Scholar; US Presidential Scholar Candidate; Eagle Scout; Team Captain of Robotics Team & Mock Trial Team; President of CS Club, NHD Club, & MUN/YIG

TECHNICAL SKILLS

Python, Java, TypeScript, C, C++, Git, MySQL, MongoDB, Django, Flask, React, Docker, Kubernetes, Haskell

WORK EXPERIENCE

Martian

Virtual

Full-Stack Developer

October 2022 – Present

- Implement new features in user interface using React and backend using Express and MongoDB
- Refactor system to match LTI specifications and enable other EdTech tools to use Martian

University of Pennsylvania

Philadelphia, PA

Teaching Assistant

September 2022 – December 2022

- *Fall 2022:* Automata, Computability, and Complexity (140+ students)
- Held office hours, graded assignments, lead review sessions, proctored exams

University of Pennsylvania

Philadelphia, PA

Research Assistant

May 2022 – August 2022

- Developed dashboard to help research team track smart contracts on Ethereum blockchain using React, Express, MongoDB, TypeScript, and BigQuery
- Automated fuzzing programs to expedite team's analysis of smart contracts by over 75%

Steppingstone Scholars, Inc.

Philadelphia, PA

Instructor

October 2021 – May 2022

- Planned lesson plans and prepared students for Java-based AP Computer Science A exam
- Taught data structures, sorting algorithms, and object-oriented program design to 10+ students biweekly

OTHER PROJECTS

Penn Labs | Penn Mobile | Team Lead

February 2022 – Present

- Lead backend in writing RESTful API with Django for Penn Mobile application with 8000+ monthly users

Bash

February 2023

- Created shell using C which supports redirections, pipelines, background processes, job control, etc.

Whitespace Compiler

November 2022 – December 2022

- Designed compiler for esoteric language Whitespace to ARM Assembly using Haskell
- Ensured correctness using extensive property-based testing (QuickCheck)

Minesweeper

October 2022

- Built popular 1989 puzzle game using C++ with added feature of saving/loading past games