# **EL WHITTLE**

Brooklyn, NY | (270) 935-9956 | elijah.whittle@nyu.edu | https://elijahwhittle.github.io

## **SUMMARY**

Senior BS computer science student minoring in robotics and mathematics. Main interests and experience in machine learning, robotics, neuroscience, and design and construction of programming languages. Tutor with 3 years' experience tutoring intro to CS, data structures & algorithms, and object-oriented programming at NYU Tandon. Developed arm motion detection models with EEG data in a ML group project up to 94% accuracy. Experience in compilers, databases, parallel and distributed systems, virtual reality, game design, perception, biopsychology, quantum computing, and digital marketing.

#### **EDUCATION**

New York University, Tandon School of Engineering, Brooklyn, NY

Sep. 2020 - Present

Bachelor of Science, Computer Science

**GPA**: 3.76

Honors and Awards: Dean's List ('21-22, '20-21)

Global Leaders and Scholars in STEM (GLASS) Scholar

NYU Global Program: Study Abroad in Abu Dhabi (Jan. 2022 – May 2022)

<u>Relevant Courses</u>: Intro to Machine Learning, Intro to Parallel & Distributed Systems, Intro to Databases, Design and Implementation of Programming Languages, Open Source and Professional Software Development, Software Engineering, Virtual and Augmented Reality, Perception, Biopsychology

## **SKILLS**

Programming Languages: C++, Python, Go, Java, TypeScript, SQL, Haskell, Ruby, 9 others

Software/Libraries: Git, GitHub, GitHub Actions, Unity, Flask, NumPy, SKLearn, Pandas, LangChain

**Tutoring:** CRLA Certified Tutor, Level 1

#### **EXPERIENCE**

Software Engineering Intern, Qiqochat, Brooklyn, NY

Oct. 2023 - Present

- Integrate large language model chatbot service with existing platform using LangChain
- Connect chatbot service to vector database of product forums using Weaviate

Computer Science Tutor, NYU Polytechnic Tutoring Center, Brooklyn, NY

Nov. 2021 - Present

- Guide students through concepts from three core computer science major courses in Python and C++
- Make 40-90-minute mock exam review videos for Object Oriented Programming course

Undergraduate VR Researcher, NYU Undergraduate Summer Research, Brooklyn, NY

Jun. 2022 – Aug. 2022

- Prototyped Materials Science Lab environment using Unity and XR Interaction Toolkit with three-person team
- Implemented functionality for Universal Testing Machine model and specimens to simulate lab activity

## **RELEVANT PROJECTS**

News Bias Tool, Software Engineering, NYU, Brooklyn, NY

Oct. 2023 – Present

- Develop a web-based tool leveraging web scraping, LLMs, and a vector database identify biases in news articles.
  ML Arm Motion Prediction, Intro to Machine Learning, NYU, Brooklyn, NY
  Feb. 2023 Mar. 2023
- Developed models using Python, NumPy, Pandas, and SKLearn that detected arm motion based on EEG data
- SVM and logistic regression models: 112 features, 80% training data (2,304 entries), 67-94% accuracy
- Neural network: 112 features, 60% training data (1,708 entries), 70-91% accuracy

COOL Compiler, Compiler Design & Construction, NYU, Brooklyn, NY

Nov. 2022 – Dec. 2022

- Created compiler for the Classroom Object Oriented Language (COOL) using C++
- Made and combined scanner (flex), parser (bison), semantic checker, and code generator

Website with Database Backend, Intro to Databases, NYU, Brooklyn, NY

Nov. 2022 - Dec. 2022

Developed airplane ticketing system using HTML, SQL, Flask, and XAMPP/phpMyAdmin in three-person team

#### ADDITIONAL ACTIVITIES

Advent of Code: Dec 2022 Google Kick Start: 2021, 2022

NYUAD Hackathon for Social Good: Quantum Computing. 2nd Place (with group), Abu Dhabi: Mar. 2022

NYU HAQathon, Sep. 2023