# **Brian Farrell**

Raynham, MA | brianfarrell800@gmail.com | (508) 386-6012 | Tufts Graduate Co-Op Program | My Website

#### **EDUCATION**

Tufts University Expected Graduation: December 2025

Master of Science | Computer Science

GPA: 3.88 | Relevant Coursework: Computer Vision, Software Engineering, Big Data, Human Computer Interaction

Stonehill College May 2024

Bachelor of Science | Major: Computer Science Minor: Mathematics

GPA: 3.68 | Dean's List | Lambda Epsilon Sigma Honor Society | Moreau Honors Scholar | Cum Laude | Honors in Computer Science

# **SKILLS**

Computer Languages: Python, C++, R, Java, JavaScript, TypeScript

**Software:** AWS, Jira, Confluence, Gitlab, VS Code, MySQL, TensorFlow, Scikit-learn, Kubernetes, Docker, React, React Native, Flash Django, Node.js, Flask, Digital Ocean, DBeaver, Xcode, Test Flight, Apache, Postman, Wireshark, OneSignal, Expo, MobaXterm, Power BI, Hadoop, Spark, Google Cloud, NumPy, Pandas, LibTorch, Linux

## **PROJECTS**

#### **Sphero Collider Project**

October 2024 – December 2024

Developed study to measure how people felt about hurting assistive robots.

# **Hummingbird Nurse Website**

April 2024 – May 2024

• Worked with business owner to create website for nurse consulting company.

## **Earthquake Magnitude Prediction Model**

November 2023 – December 2023

- Developed machine learning models to predict magnitude of earthquakes given a list of regressors.
- Models included linear regression, decision trees, KNN Regressor, Random Forest, Sequential Neural Network.
- Wrote Research paper on the results following IEEE formatting.

#### Research Paper Analyzing Impact of Music on Mood

September 2022 – December 2022

• Wrote paper on the results of research into how music impacts mood of college students.

# **ENGINEERING EXPERIENCE**

# General Dynamics Mission Systems | Taunton, MA

December 2024 - Present

Software Engineer Intern

- Implemented dashboard to increase productivity by displaying status for current agile stories.
- Improved efficiency of dashboard by pulling directly from a database instead of excel files.
- Added features based on feedback from team members to increase the effectiveness of the dashboard as a tool.
- Updated Gantt charts in Power BI using typescript.

# Jewish Positivity Capstone | Easton, MA

January 2024 - August 2024

- **Development Operations Engineer** 
  - Developed iOS and Android app for promoting prayer and community among the local Jewish community.
  - Configured and fixed issues with peers' development environments which allowed improved team productivity.
  - Automated daily push notifications using OneSignal API framework.
  - Deployed the app frontend to production using Test Flight and the backend to Digital Ocean server using Apache and Docker to allow the product owner to test the app himself.
  - Created production version of the app using Xcode and Test Flight for the front-end and hosted the backend on a digital ocean server using a docker container.
  - Onboarded and assisted with any issues for new development team taking over the project to foster a smooth transition.

## Local Treasure Start Up | Wayland, MA

August 2023 - December 2023

Full Stack Developer Intern

- Developed and maintain IOS and Android App using React-Native and Django.
- Communicated with business owner to transform imagination into a functional product consistent with the vision.
- Added features to the mobile app using Google Maps API.

# General Dynamics Mission Systems | Taunton, MA

June 2023 - August 2023

Software Engineer Intern

- Developed environmental logging scripts used for testing hardware.
- Integrated unit tests into the CI/CD DevSecOps pipelines to run automatically with every commit.

- Set up virtual machines and AWS clusters to run with the scripts.
- Used Kubernetes and Docker containers to run the scripts using the hardware.
- Participated in a high-level meeting discussing an upcoming demonstration of the project.
- Demonstrated work to supervisors, managers, and shareholders on multiple occasions.

#### **TEACHING EXPERIENCE**

CodeWiz Quincy | Quincy, MA

September 2024 – December 2024

Coding Instructor

• Worked with kids to follow a coding curriculum including MCreator, Roblox Studio, Scratch, and Python.

Stonehill College | Easton, MA

August 2022 - May 2024

Subject Tutor, Teaching Assistant

- Worked with students individually on a wide range of potential math or computer science courses.
- Guided students on how to improve study habits and how to approach homework problems.
- Hosted review sessions to help students with homework programs and other class projects.
- Communicated with the professors on specific ways to improve the course's content and workload.