# anniebryan.github.io github.com/anniebryan

#### EXPERIENCE

#### **Arrow Street Capital**

 $Quantitative\ Developer$ 

Jan 2023 - Present

Boston, MA

• Developing software that supports the investment research production process

Meta Software Engineer Sep 2022 - Nov 2022 *Boston*, *MA* 

• Contributed to 5+ full-stack projects that improved internal workflows and user experiences.

Designed and implemented a user interface for an ML document-processing service as a Hackathon project.

Cybersecurity Intern

Muninn

**Facebook** 

Summer 2022

Copenhagen, Denmark

• Wrote scripts to analyze network traffic, detect malicious behavior, and alert users of potential threats.

• Developed metrics to improve the fit of an anomaly detection model while maintaining generalizability.

Software Engineering Intern

Summer 2021 Menlo Park, CA

• Integrated a tagging feature into an internal tool for curating and uploading news content.

• Designed full-stack software feature specifications while working with team members and cross-functional stakeholders.

MathWorks

**Summer 2020** 

Engineering Development Group Intern

Remote

Developed full-stack customer-facing web applications; pushed code to production for over 1,000 users per day.
Drafted thorough documentation for testing plans, requirements, use cases, and functional/architectural design.

#### Universidad Politécnica de Madrid

Summer 2019

Data Science Research Assistant

Madrid, Spain

- Constructed models around cleaned datasets; compared effectiveness and accuracy of each model.
- Evaluated correlational coefficients between properties such as connectivity, transitivity, and reciprocity.

#### SKILLS

Languages: Python, Java, PHP, C++, JavaScript, MATLAB, Julia, R, Stata

Frameworks: React, Vue, Node, Express, Flask, MySQL, MongoDB, TensorFlow, Keras, Scikit Learn, Pytorch

Tools: Git, Docker, Kubernetes, Visual Studio Code, Eclipse, IntelliJ

### Projects

Interface for ML Interpretability | React, NLPaug, TensorFlow, sklearn, keras

Sep 2021 – May 2022

• Created a user interface for users to build NLP models, define training and test sets, and visualize the results.

Stance | Vue, Express, Node

Nov 2021 – Dec 2021

• Developed a web application for political candidates to communicate with voters about relevant issues.

Interlock for Self-Driving Cars | Python, numpy, open3d, skimage, ffmpeg, CARLA Sep 2020 - May 2021

• Devised a path prediction algorithm to determine if an autonomous vehicle will collide with any objects in its path.

G Suite Dashboard | JavaScript, Google AppsScript

Jan 2021

- Consulted with a local educational non-profit to identify their needs and design and deploy an effective solution.
- Built an application to automate reminder emails, reducing the time needed by volunteers by 95%.

**Tempo** | C++, Python, SQLite, Arduino

Mar 2020 - May 2020

- $\bullet$  Created a fitness device that plays a song to a user's device based on their running speed and music preferences  $% \left( 1\right) =\left( 1\right) \left( 1\right)$
- Implemented the back end to read step frequency and make HTTP requests to Spotify's REST API.

Artificial Synapses for Neuromorphic Arrays | MATLAB, Python, TensorFlow

Feb 2019 - May 2019

• Developed a neural network to predict and extend machine lifetime.

#### LEADERSHIP

#### MIT Women's Varsity Volleyball

Aug 2018 – Nov 2021

 $CoSIDA\ A cademic\ All-America,\ AVCA\ All-America,\ NEWMAC\ Conference\ Tournament\ MVP$ 

VP of New Member Education for Phi Sigma Rho Sorority

 ${
m Feb}\ 2021-{
m Apr}\ 2022$ 

Scheduled and led new member education sessions for sorority candidates

# Tutor for HKN Honor Society

Sep 2020 - May 2021

Tutored students in 6.034 (AI), 6.036 (ML), 6.046 (Algorithms), and 6.0001 (Intro to CS in Python)

# MIT Committee on Curricula

Sep 2020 – May 2021

Discussed and voted on proposals to create or revise undergraduate subjects and programs

## MIT IEEE Exec Board Officer

Sep 2019 - May 2021

Faculty-Student Chair: Coordinated an undergrad research symposium and social events between faculty and students Secretary: Took organized minutes at all meetings, followed up on relevant action items, assisted with managing budget EDUCATION

#### Massachusetts Institute of Technology

Cambridge, MA