anniebryan.github.io github.com/anniebryan

### EXPERIENCE

Muninn Summer 2022

Cybersecurity Intern

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

Facebook Summer 2021

Software Engineering Intern

Menlo Park, CA

- Integrated a tagging feature into an internal tool for curating and uploading news content
- Met with cross-functional stakeholders and team members to design full-stack software feature specifications

MathWorks Summer 2020

Engineering Development Group Intern

Remote

- ullet Developed full-stack customer-facing web applications; pushed code to production for >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 including connectivity, transitivity, and reciprocity

#### SKILLS

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

Frameworks: React, Vue, Node, Express, Flask, TensorFlow, MySQL, MongoDB

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

#### **PROJECTS**

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

Sep 2021 - May 2022

• 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

• Web application for political candidates to communicate with voters about relevant issues

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

• Devised a path prediction algorithm to check 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

- Created a fitness device that plays a song to a user's device based on their running speed and music preferences
- 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 Academic All-America, AVCA All-America, NEWMAC Conference Tournament MVP

VP of New Member Education for Phi Sigma Rho Sorority

Feb 2021 - Apr 2022

Schedule and lead 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**