# **Annie Bryan**

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### **EDUCATION**

Massachusetts Institute of Technology (MIT)

Cambridge, MA

B.Sc., Double major in Computer Science and Mathematical Economics, GPA: 4.8 / 5.0

Class of 2022

# **TECHNICAL SKILLS**

Languages: Python, Java, C/C++, Ruby, PHP/Hack, HTML, CSS, JavaScript, MATLAB, R, Julia, Stata Frameworks/Libraries: Ruby on Rails, React, Vue, Express, Node, Flask, TensorFlow, MySQL, MongoDB Tools: Git, Perforce, Mercurial, Docker, Visual Studio Code, PyCharm, IntelliJ, Eclipse

EXPERIENCE

Facebook

Muninn Summer 2022

Cybersecurity Intern

Copenhagen, Denmark

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

Software Engineering Intern

Summer 2021 Menlo Park, CA

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

MathWorks Summer 2020

Software Engineering Intern

Remote

- Developed full-stack customer-facing web applications; pushed code to production for >1000 users per day
- Drafted thorough documentation for testing plans, requirements, use cases, and functional/architectural design
- Generated UI wireframes for new workflows, presented designs to users, and integrated feedback

Universidad Politécnica de Madrid

Summer 2019

Data Science Research Assistant

Madrid, Spain

- Explored topics in graph theory with a focus on dynamic phone networks from Senegal
- Constructed models around cleaned datasets and compared effectiveness of each model
- Evaluated correlational coefficients between properties including connectivity, transitivity, and reciprocity

#### **PROJECTS**

Interface for Machine Learning Interpretability | React, NLPaug, TensorFlow, sklearn

Sep 2021 — May 2022

• Created a UI for users to build NLP models, define and run test cases, and visualize the results

Stance | VueJS, ExpressJS, NodeJS

Nov 2021 — Dec 2021

- Designed and implemented a web app 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 check if an autonomous vehicle will collide with any objects in its path
- Tested the self-driving system in various scenarios using open-source autonomous driving simulation software

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
- Developed a web UI that allows a user to perform CRUD operations on their database of past runs and playlists

Artificial Synapses for Large-Scale Neuromorphic Arrays | MATLAB, Python, TensorFlow. Feb 2019 — May 2019

• Developed machine learning tools to predict and extend machine lifetime

## **LEADERSHIP**

VP of New Member Education for Phi Sigma Rho Sorority	Feb 2021 — Apr 2022
Computer Science Tutor for HKN Honor Society	Sep 2020 — May 2021
Undergraduate Representative on MIT Committee on Curricula	Sep 2020 — May 2021
MIT IEEE Exec Board Officer	Sep 2019 — May 2021
MIT Women's Varsity Volleyball	Aug 2018 — Nov 2021

• CoSIDA Academic All-America, AVCA All-America, NEWMAC Conference Tournament MVP