Michelle Bryson

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Education

Carnegie Mellon University — *Pittsburgh, PA*

Bachelor of Science in Electrical and Computer Engineering, Minor in Robotics — *Expected May 2024*

- **Relevant Coursework:** Principles of Imperative Computation, Space Robotics Development, Structure and Design of Digital Systems, Fundamentals of Mechanical Engineering, Technology, Humanity, and Social Justice
- **Activities:** Robotics Club, ScottyLabs, Society of Women Engineers, Women in ECE, All-University Orchestra

Professional Experience

Google — *Kirkland, WA*

STEP Intern — *May 2022 - Present*

- Collaborated closely with another intern to develop the UI for the new curstomer-requested Configurable Analysis feature for Contact Center AI Insights, using Angular, NgRx, and RxJS
- Led meetings with the team's product manager, UX designers, and UX researchers to discuss and finalize UX design choices
- Authored technical documents including a project design doc, starter project research doc, and a UX sync doc

Google — *Remote*

STEP Intern — *May 2021 - Present*

- Leveraged Java, TypeScript, and Google-internal frameworks to implement redesigned UI of the Play Store website's Wishlist page, which averages over 1.1 million page views per month
- Implemented style overhaul and coordinated with backend engineers to separate Wishlist items into individual corpora
- Attended tech talks, speaker series, and professional development workshops such as time management and technical writing

NASA — *Remote*

L'SPACE Mission Concept Academy Scholar — *Jan 2021 - May 2021*

- Collaborated as an electrical engineer to design an exploration vehicle that captures strategic science in Venus's atmosphere
- Delivered a Preliminary Design Review consisting of a 96-page report and a 90-minute live presentation to NASA engineers
- Completed skills training and assessments in Siemens NX CAD, spacecraft thermal analysis, risk management, and more

Astrobotic — *Pittsburgh, PA*

Software Engineering Intern — *Aug 2020 - Nov 2020*

- Developed flight software for CubeRover, a modular product line of lightweight planetary rovers designed for lunar exploration
- Programmed and tested I2C communication library for CubeRover's battery gauge and solar panel chip with embedded C++
- Documented software architecture of battery/solar processor unit in NASA-reviewed Preliminary Design Report

Volunteer Experience

UNICEF — *Remote*

Mobile App Developer — *Sep 2020 - Dec 2020*

- Improved CBoard, an augmentative and alternative communication app for children with speech and language impairments
- Redesigned user interface, fixed bugs, and leveraged Flutter to expand to a mobile platform, benefiting 84,000 more children

Students for Black Lives — *Remote*

Full Stack Developer & Java Tutor — *Jun 2020 - Aug 2020*

- Tutored students in Java in exchange for donations to BLM organizations, helping to collectively raise over $22,000
- Constructed website in HTML/CSS and JavaScript, and integrated Google Sheets API to track and display donations live

Projects

Rationality — *3rd Place, Epsilon Hacks*

Mobile App Developer — *Jun 2020*

- Developed an app in TypeScript that helps consumers reduce food waste by generating a personalized shopping list of ingredients needed based on a user's food inventory and scheduled meal plan

AID PACT — *NASA Space Apps COVID-19 Challenge*

Front End Developer — *May 2020*

- Created a website with an interactive world map that visualizes current and AI-predicted COVID-19 cases per country
- Trained machine learning model on 13 space agency datasets and utilized Python, HTML/CSS, and JavaScript

Skills

Programming Languages	Java, Python, C++, JavaScript, HTML/CSS
Tools and Technologies	Git, Angular, TensorFlow, Flutter, MATLAB, ROS, AutoCAD, SOLIDWORKS, Siemens NX