

# Emily R. Robinson

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## Education

**Cornell University, College of Arts & Sciences** | *B.A. Computer Science*

August 2019 - May 2023

**Related Courses:** Foundations of Artificial Intelligence; Practicum in AI; Practical Tools for Operations Research; Machine Learning and Data Science; Intro to Machine Learning; Theory of Algorithms; Data-Driven Web Applications; Data Structures and Functional Programming; OO Programming and Data Structures; Discrete Structures and Logic; Intro to Operating Systems; Unix Tools and Scripting; Foundations in Leadership

**Online Courses:** Intro to MongoDB (LinkedIn), Intro to Deep Learning (Kaggle), Intro to Java Spring Framework (Amigoscode - Presently), Learning AWS for Developers (LinkedIn – Presently), Intermediate Machine Learning (Kaggle – Presently)

## Technical Skills

**Programming Languages:** Python (Advanced), Java (Advanced), HTML5/CSS3 (Advanced), JavaScript/TypeScript (Advanced), OCaml (Advanced), Bash Scripting (Intermediate), C (Intermediate), C# (Intermediate), SQL (Intermediate), C++ (Familiar), R (Familiar), NodeJS (Familiar)

**Libraries/Frameworks:** D3 (Advanced), React (Advanced), Visio (Advanced), TensorFlow (Advanced), Qualtrics (Advanced), Pandas (Intermediate), NumPy (Intermediate), REST API (Intermediate), Flask (Intermediate), MongoDB (Intermediate), MySQL (Intermediate), Firebase (Intermediate), Tableau (Intermediate), XML (Intermediate), Qualtrics/Momentive (Intermediate), Google Analytics (Intermediate), Google Cloud (Intermediate), Microsoft Access (Intermediate), Django (Familiar), NLTK (Familiar), Bootstrap (Intermediate), Tailwind (Intermediate), AWS (Familiar)

## Work Experience

**Technical Support Lead** | *CR Market Surveys (Part-time)*

January 2021 - Present

- Maintain and manage the company's website
- Utilize **Google Analytics** to increase website traffic, currently achieving a 30% increase
- Clean, manage, and expand a 20,000+ respondent database using **Microsoft Access**
- Program consumer surveys using **Qualtrics** and **Momentive** software
- Assist in analyzing UX research data related to website and app measurement
- Manage, update, and set up computers, telephones, and devices
- Troubleshoot technical issues
- Share surveys with users in the database and via social media and conducted follow-up surveys by phone

**Computer Science College Admissions Mentor** | *Crimson Education*

December 2021 - Present

- Mentor students in brainstorming and implementing technical leadership projects such as app and website development
- Address over 20+ technical, code-related questions per week
- Conduct up to 10 hours of weekly consultations, including progress reports, homework assignments, and parental meetings
- Guide students in extracurricular activities, academics, college decisions, and leadership projects

**Project Manager** | *CR Market Surveys (Part-time)*

July 2023 - September 2023

- Managed customer satisfaction survey research at O'Hare International Airport
- Recruited and interviewed a team of 16 surveyors from 328 applicants
- Created applicant surveys via Google Forms and managed responses in Excel
- Trained interviewers on the survey software and tablet computers used for data collection
- Supervised interviewers and helped maintain data collection guidelines throughout the project
- Guided and motivated the team to conduct 4,200 surveys over two weeks, exceeding the client's goal by 20%
- Facilitated effective communication with the client and team through daily reports, Microsoft Teams, and the Connecteam app

**Software Engineer** | *NetWeaver (Contract)*

September 2023 – October 2023

- Created a bootable USB for automated Windows 10 installation with custom software on 15 computers
- Developed 2 **batch script** files for automatic software installations upon initial user login
- Programmed an unattended installation file in **XML** to create multiple users and execute first login commands
- Edited the Windows 10 image using Deployment and Image Tools Environment (DISM) commands

**Teacher's Assistant CS2043 Unix Tools and Scripting** | *Cornell University (Part-time)*

January 2023 - March 2023

- Held 3 weekly in-person office hours, assisting 25+ students with bash scripting assignments and learning course material
- Answered 20+ student coding questions and problems posted on the Ed Discussion platform per week
- Communicated frequently, with students and staff, through Slack and email and participated in bi-weekly staff meetings

### Software Developer | Pairup (Internship)

May 2022 - August 2022

- Developed a **React** web app with a dynamic bar graph using Uber's react-vis library, providing essential mentor-mentee pairing insights
- Created a separate React web app to analyze user data using **SQL** queries to the company's user database in **Google Cloud**, resulting in 45% improvements in user engagement analysis
- Utilized **TypeScript**, **JavaScript**, and **JSX** in the app's development

### Teacher's Assistant CS1110 Intro to Python | Cornell University (Part-time)

September 2020 - May 2022

- Conducted regular in-person group sessions, providing guidance to 50+ students in test preparation and homework assignments
- Facilitated students' understanding of programming concepts through interactive **Python** coding demonstrations and practical exercises
- Assisted students by promptly addressing on average 40 Python coding questions on the Ed Discussion platform per week
- Graded over 100 student assignments and 25 exam entries on Gradescope per semester, offering feedback, which helped students' course performance
- Maintained effective communication with students and staff via email and Slack, promptly addressing 30+ inquiries and concerns weekly

## Dev Projects

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### Time-Tracker App

June 2023 - Present

- Develop a full-stack web application that helps users manage their time and enhance productivity through efficient task tracking
- Create the application using **React** and **Typescript** with a **Firebase** user database
- Utilize **Firebase Authentication** and create **REST APIs** with **Python Flask**
- Leverage the **React Router** library for seamless navigation between different pages
- Employ **PostCSS** and **Tailwind** for streamlined **CSS** development, resulting in improved code efficiency and maintainability

### Restaurant Recommendation AI

January 2023 - May 2023

- Led a three-person **Agile** team in the development of an **AI** system coded in **Python** that delivers personalized restaurant recommendations
- Implemented a user input feature to capture restaurant preferences and used the data to query the **Yelp API**
- Utilized **TensorFlow** to train a **neural network** on labeled review data, calculating the likelihood of positive reviews
- Calculated total normalized review and rating scores for each restaurant, applying **Principal Component Analysis** for weight assignment
- Created a scoring function that combined the weighted scores to assign a comprehensive evaluation for a given restaurant
- Presented the top-N recommendations based on their scores
- Managed seamless collaboration, overseeing project progress, coordinating tasks, and writing project reports

### GDP Map

September 2022 - October 2022

- Directed a three-person **Agile** team in designing data visualizations of GDP and life expectancy data using **JavaScript** and the **D3** library
- Developed over 5 functions to filter, format, and parse relevant details from the data
- Created a choropleth map with a hover feature that displays the selected country's GDP, life expectancy, and population
- Ensured adherence to milestone deadlines, led over 30 team meetings, and prepared 3 project reports