

# Mitchell Lai

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## EDUCATION

**Northwestern University** · Evanston, IL

June 2022 (anticipated)

Bachelor of Science in Computer Science

GPA: 3.7/4.0

Relevant Coursework: Programming Languages, Human-Computer Interaction, Introduction to Theory of Computation, Data Structures and Algorithms, Introduction to Computer Systems, Fundamentals of Computer Programming, Linear Algebra

## SKILLS

**Full Stack Technologies:** Node.js, Express.js, React.js

**Database Management:** DynamoDB (AWS), MongoDB

**Version Control:** Git/GitHub

**DevOps:** EC2 (AWS) Server Configuration

**Programming Languages:** JavaScript, Python, C++, C, HTML, CSS, Bash

**Libraries:** Cheerio.js, Puppeteer.js, OpenCV, Material UI

## EXPERIENCE

**Wynd Technologies** · Redwood City, CA

June 2020 – Present

*Software Development Intern*

- Design and develop a health-monitoring application that parses hourly logger messages from 77 concurrent web scraping scripts, displays said messages on a web page, and sends email and SMS notifications to company employees.
- Deploy systems on EC2 (AWS) instances by writing UNIX shell scripts to automate server configuration.
- Write and debug web-scraping scripts in JavaScript (Node.js) to collect air-quality data from upwards of 42,000 weather stations across the world and properly format said data as entries in DynamoDB and MongoDB for AQI calculations in the company's flagship mobile app, *Air Bubbles*.
- Deliver consistent progress reports and project proposals during daily Agile scrum meetings over Zoom.

**Northwestern University Medill School IT** · Evanston, IL

October 2019 – March 2020

*Computer Consulting/Administrative Aide*

- Assisted students, faculty, and staff with common classroom technology usage.
- Managed office space by ensuring the security and organization of classroom technology equipment inventory.

**Brighter Future Learning Center** · Saratoga, CA

January 2019 – June 2019

*Math and English Tutor*

- Facilitated 46 elementary school students with daily homework along with supplementary math and English assignments in order to improve academic performance.
- Enforced proper classroom behavior among students to ensure an environment that is conducive for learning.

**Analog Devices** · San Jose, CA

July 2018 – August 2018

*Internal Communications Intern*

- Interviewed engineers for employee profiles featured on new company website.
- Wrote and edited articles/memos for Analog's internal communications platform.

## PROJECTS

**Design, Thinking, and Communication** · Evanston, IL

March 2020 – June 2020

*Sustainability Web Application*

- Designed React.js front-end web application for users to track single-use plastic habits and other sustainability practices.
- Collaborated with 3 other students to perform user research, create mockups/prototypes, and compile documentation.

**Soapbox** · Cupertino, CA

March 2020 – June 2020

*Fake News Detection Machine Learning Application*

- Wrote Python scripts to scrape metadata from websites of major news networks and fake news sources to collect training set for machine learning model.
- Programmed application front-end in React.js to display the quality of an article with an SVG animated meter.

**Develop and Innovate for Social Change** · Evanston, IL

January 2020 – June 2020

*Analytics Dashboard for Community Currency (Non-profit Organization)*

- Built dynamic login page with React.js and Material UI that handles user authentication and supports sign-in with Google functionality.
- Worked with 4 other students to plan, propose, design, and implement data analytics dashboard in React.js to track the fullness of currency collection bins located inside O'Hare International Airport.

**Dot Dev** · Evanston, IL

January 2020 – June 2020

*Image Processing and Computer Vision Application*

- Implemented image processing algorithm that maps an image's contrast to discrete values and transforms an image with poor contrast using OpenCV's histogram equalization functions.
- Researched image processing techniques such as changing an image's color space, applying a geometric transformation to an image, image thresholding, and manipulating an image's RGB channels.