

# Lily Tao

2A SYSTEMS DESIGN  
ENGINEERING

## CONTACT

 [lilytao.me](https://lilytao.me)

 [lily.tao@uwaterloo.ca](mailto:lily.tao@uwaterloo.ca)

 [linkedin.com/in/lily-tao/](https://linkedin.com/in/lily-tao/)

 [github.com/lilytao2001](https://github.com/lilytao2001)

## SKILLS

### Languages

- C++
- Java
- JavaScript
- HTML/CSS
- MATLAB

### Technologies

- Firebase
- MongoDB/Mongoose
- ReactJS/Redux
- React Native
- NodeJS
- Express
- Git
- Talend Data Integration
- Vercel

## EDUCATION

### University of Waterloo

Systems Design Engineering (2019-2024)

- Data Structs. & Algorithms (C++)
- Digital Computation (C++)
- Digital Systems (microprocessors, circuits)
- Engineering Prototyping

## AWARDS

### DECA

Competitive Case Competition

- 3/170 Place Internationals (2019)
- 1/150 Place Provincials (2019)

### Top 25% Euclid

International University of Waterloo Math Competition (2019)

## INTERESTS

Art (Oil, Acrylic, Portraits, Calligraphy)

Film Photography

## EXPERIENCE

### Full Stack Web Developer

Year Zero Studios (Sept. 2020 - Dec. 2020) 

- Worked in two teams of interns as a lead developer and product manager to build novel web applications in an agile environment

Mental Health Score 

- Utilized **ReactJS**, **Firebase**, **Express**, and **Vercel** as a lead developer to design, develop, and deploy an optimized and user friendly mental health scoring assessment from scratch
- Led strategic **product development** and UIUX design by facilitating weekly design sprints, amassing **1000+ unique users** since Nov. 2020 public release

Wellify 

- Grew Wellify's existing **JavaScript** codebase by 30% through code refactoring and new feature integration such as the class editing user flow
- Connected ReactJS frontend to Firebase backend using **Firebase API**, allowing Wellify instructors to create new classes, edit existing classes, and access student information

### Developer

TD Bank (Jan. 2020 - Apr. 2020)

- Modernized legacy code in **Java** for financial reporting applications to deploy to higher testing environments
- **Automated** file transfer processes from external databases by creating scripts, reducing processing times by **70%**
- Wrote **Talend ETL** jobs to load and extract financial application data to and from **Hadoop** datastore
- Complied with the system development life cycle (**SDLC**) and product development life cycle (**PDLC**) to create project documentation leading to improved project awareness and utilization across the team

## PROJECTS

### My Film Journal

ReactJS, MongoDB, Express, Node (2020-2021)

- **Full stack** application that allows film photographers to keep track of their photography settings sorted by film roll instead of using a physical journal
- Currently working on implementing **user authentication** and redesign

### Trash Sorter

ReactJS, Azure Custom Vision, HTML (Hack the North 2021)

- **Trained** and deployed a **computer vision model** and implemented Microsoft's **Prediction API** to classify images of waste uploaded by users and determines if it is recycling, garbage, or compost

### Herolines

ReactJS, Firebase, Node (uOttahack 2021)

- Application that allows healthcare workers to search for deals and benefits based on location and category. Used the **Google Map API** and **Google Place API** to pinpoint the nearest store according to the user's instant location.

### Personal Website

Bootstrap, Javascript, HTML, CSS (2019)

- **Designed and developed** personal website to showcase current projects, work experience, and artistic works