

# Mandy Liou

[mandyliou.github.io/portfolio/](https://mandyliou.github.io/portfolio/) | [linkedin.com/mandyliou](https://linkedin.com/mandyliou) | [gitlab.com/mandyliou](https://gitlab.com/mandyliou) | [mandyliou@alumni.emory.edu](mailto:mandyliou@alumni.emory.edu)  
Los Angeles, CA

## EDUCATION

<b>Hack Reactor</b> , Advanced Software Engineering Certificate	Sept 2022 - Feb 2023
<b>Coursera</b> , Google Data Analytics Professional Certificate	Jun 2022 - July 2022
<b>Marshall B. Ketchum University - SCCO</b> , Doctor of Optometry Program	Aug 2021 - May 2022
<b>Emory University</b> , B.A. - Psychology; A.A. - Liberal Arts   Oxford Honors & Merit List	Aug 2015 - Dec 2018
<b>Nanjing &amp; Peking University</b> , Chinese Studies   Visiting Scholar	May 2016 - Jul 2016

## TECHNICAL SKILLS

**Programming Language:** Python 3, JavaScript ES6+, SQL, R

**Servers:** DigitalOcean Linux, AWS EC2, Docker, Caprover

**Front-End Development:** HTML5, CSS, React, DOM manipulation, BootstrapCSS, Websockets, Redux Toolkit

**Back-End Development:** Django 4, Node.js, PostgreSQL, FastAPI, RabbitMQ, RESTful API, MongoDB, Apache Kafka

## APP DEVELOPMENT

**Fitster** | Full stack | [github.com/mandyliou/fitster](https://github.com/mandyliou/fitster) | React, Docker, PostgreSQL, FastAPI Dec 2022 – Feb 2023

Developed a multi-tier, microservice-based web application for fashion enthusiasts to share and view personalized outfits

- Implemented agile methodology in collaboration with a team of 5 engineers, resulting in a 35% increase in productivity
- Programmed a secure and user-friendly interface using FastAPI and JWT (JSON Web Token) for authentication integration with PostgreSQL databases, resulting in a 98% decrease in security breaches
- Successfully deployed the application with a CI/CD pipeline and validated its functionality through unit tests, including key features such as user registration, login, outfit creation, and profile viewing

**Auto Log** | Full stack | [github.com/mandyliou/auto-log](https://github.com/mandyliou/auto-log) | Django, React, SQLite3, RESTful API Nov – Dec 2022

Designed a SPA for a car dealership and service appointment management

- Co-developed a full-stack project and successfully debugged over 200 issues
- Incorporated polling to connect separate microservices, resulting in a 50% increase in data transmission speed
- Integrated DOM manipulation to develop models for services, sales, and inventory microservices

**Event Planner** | Full stack | [github.com/mandyliou/event-planner](https://github.com/mandyliou/event-planner) | Django, React, Docker, RESTful API Oct – Nov 2022

Developed a SPA for conference management and integrated third-party APIs for location and weather data

- Launched an application that enabled users to utilize CRUD on the conference, location, presentation, and attendee data, with CSRF authentication, resulting in a decrease of 30% in data errors
- Utilized Docker for RabbitMQ to manage microservices and create scalable queues for increased stability

**Project Management** | Full stack | [github.com/mandyliou/project-management](https://github.com/mandyliou/project-management) | Django, HTML, CSS Sep – Oct 2022

Designed a multi-tier web application for project organization

- Created and configured code using Django for Project and Task models, and implemented user authentication using CSRF to ensure data integrity and provide users with the ability to sign up, log in, and log out
- Constructed a task manager for project timelines, resulting in an increase in productivity and efficiency

## WORK EXPERIENCE

**Comprehensive Eye Care**, Hollywood, CA Oct 2019 – Mar 2020

*Optometrist Intern*

- Devised strategic roadmaps enhancing patient experience, increasing the overall NPS by 10% in 5 months
- Programmed equipment maintenance operations instructions, troubleshoot breakdowns, performed preventive maintenance, and repaired request ticket resolution with a 17% increase in execution speed

**Young's Medical Center**, Atlanta, GA Jul 2017 – Jan 2018

*Medical Assistant & Neurodiagnostic Technician*

- Managed a team of 3 employees to streamline recordkeeping operations, resulting in a 20% increase in billing processes, 25% increase in overall efficiency, and the maintenance of a comprehensive medical record database with 99% accuracy
- Overhauled existing patient confidentiality/HIPAA measures by identifying 3 fail points within the existing patient flow

**UCLA Semel Institute**, Los Angeles, CA Jun – Aug 2018

*Research Assistant*

- Coordinated neurocognitive assessments and constructed a data-driven strategy that yielded a 14% decrease in exam time
- Recorded progress of patients during treatment, provided researchers with a better understanding of the brain's role in attention, learning, and memory in schizophrenia with data-driven analytics review and post-treatment care data

**Yerkes National Primate Research Center**, Atlanta, GA Jun 2017 – Jan 2018

*Research Assistant in anxiety, depression, and PTSD*

- Utilized Plexon for brain tissue histology to analyze the connection between the amygdala and neurohormone activities
- Arranged a daily workflow for a team of 13 members, resulting in a 22% increase in productivity