

Mandy Liou

mandyliou.github.io/portfolio/ | linkedin.com/mandyliou | gitlab.com/mandyliou | mandyliou@alumni.emory.edu
Los Angeles, CA

EDUCATION

Hack Reactor , <i>Advanced Software Engineering Certificate</i>	Sept 2022 - Feb 2023
Coursera , <i>Google Data Analytics Professional Certificate</i>	May 2022 - July 2022
Marshall B. Ketchum University - SCCO , <i>Doctor of Optometry Program</i>	Aug 2021 - May 2022
Emory University , <i>B.A. - Psychology; A.A. - Liberal Arts</i> <i>Oxford Honors & Merit List</i>	Aug 2015 - Dec 2018
Nanjing & Peking University , <i>Chinese Studies</i> <i>Visiting Scholar</i>	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 | *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 | *Django, React, PostgreSQL, RESTful API* Nov – Dec 2022

Designed a SPA for a car dealership and service appointment management

- Co-developed a full-stack project, employing PostgreSQL to efficiently manage inventory, service, and sales databases, resulting in seamless communication and increased data transmission speed
- Integrated polling to connect separate microservices, resulting in a 50% increase in data transmission speed
- Enhanced user experience and project functionality by developing RESTful microservices through DOM manipulation

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

Programmed a SPA for conference management, incorporating third-party APIs for location and weather data

- Launched an application that allowed users to perform CRUD operations on conference, location, presentation, and attendee data with CSRF authentication, providing secure user sign-up, login, and logout functionalities
- Utilized Docker for RabbitMQ to manage microservices and create scalable queues for increased stability
- Incorporated RESTful APIs with Django, facilitating seamless communication between the frontend React components and the backend database, resulting in a more efficient and user-friendly application

WORK EXPERIENCE

All USA Realty | *Data Processing Engineer* | La Palma, CA May 2022 – Present

- Automated tax record keeping and rental property management using Excel, resulting in a reduction of manual errors
- Developed and maintained a tenant tracking system, providing an efficient solution for monitoring rental payments, ensuring accurate records for all properties, and improving data organization

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

- 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 | *Medical Assistant & Neurodiagnostic Technician* | Atlanta, GA Jul 2017 – Jan 2018

- 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

Emory National Primate Research Center | *Research Assistant - Neuroscience* | Atlanta, GA Jun 2017 – Jan 2018

- Investigated the correlation between brain tissue histology and neuroactivity using data analysis software, Plexon
- Arranged a daily workflow for a team of 13 members, resulting in a 22% increase in productivity through project management and process improvement skills