Mandy Liou

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

TECHNICAL SKILLS
Programming Language: Python 3, JavaScript ES6+, SQL, R
System Design: Domain-driven design(DDD), Monoliths, Microservices, Message passing, Event sourcing
Front-End Development: HTML5, CSS, React, React Hooks, DOM manipulation, BootstrapCSS, Websockets, Redux Toolkit
Back-End Development: Django 4, Node.js, PostgreSQL, FastAPI, RabbitMQ, RESTful API, MongoDB, Apache Kafka

APPLICATION DEVELOPMENT EXPERIENCE
Fitster | Full stack Engineer | *github.com/mandyliou/fitster* | *React, Docker, PostgreSQL, FastAPI*   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
- Developed 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

Cars | Full stack Engineer | *github.com/mandyliou/cars* | *Django, React, SQLite3, RESTful API*   2023
Designed a SPA for a car dealership and service appointment management
- Collaborated with an engineer to deliver a full-stack project and successfully debugged over 200 issues
- Implemented polling to connect separate microservices, resulting in a 50% increase in data transmission speed
- Utilized DOM manipulation to develop models for services, sales, and inventory microservices

Event Planner | Full stack | *github.com/mandyliou/event-planner* | *Django, React, Docker, SQLite3, RESTful API*   2022
Developed a SPA for conference management and integrated third-party APIs for location and weather data
- Built 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 to manage microservices and create scalable queues for increased stability

Project Management | Full stack | *github.com/mandyliou/project-management* | *Django, HTML, CSS*   2022
Designed a multi-tier web application for project organization
- Developed 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 of 10% in productivity and 15% in efficiency

WORK EXPERIENCE
Comprehensive Eye Care, Hollywood, CA   Oct 2019 – Mar 2020
Optometrist Intern
- Developed and executed strategic roadmaps enhancing patient experience, increasing the overall NPS by 10% in 5 months
- Programmed equipment maintenance operations instructions, troubleshot 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
- Led 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
- Tightened 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
- Used Plexon for brain tissue histology to analyze the connection between the amygdala and neurohormone activities
- Implemented and communicated daily workflow to a team of 13 members, resulting in a 22% increase in productivity

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