

Mandy Liou

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

TECHNICAL SKILLS

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

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

Front-End Development: HTML5, CSS, React, DOM manipulation, Tailwind, Websockets, Redux Toolkit, WordPress

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

APP DEVELOPMENT

FinTrackML | Full-stack | github.com/mandyliou/FinTrackML | *MongoDB, Express.js, React.js, Node* May 2023 – Present
Programmed a finance data analytics app for tracking KPIs, transactions, and predictive revenue modeling

- Leveraged the MERN stack (MongoDB, Express.js, React, and Node.js) with TypeScript and Material-UI to develop FinTrackML, ensuring seamless financial data storage and retrieval, robust API development, and a responsive interface
- Utilized regression-js to engineer a machine learning algorithm for forecasting future revenue trends, providing users with critical data-driven insights for strategic financial decision-making
- Integrated key features such as real-time KPI monitoring, transaction tracking, and dynamic financial data visualization, enhancing user interaction and understanding

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

WORK EXPERIENCE

IVY Planner Consulting | *Web Developer* | Irvine, CA Mar 2023 – Present

- Designed and implemented complex WordPress solutions, utilizing CSS, HTML, and JavaScript for website development
- Collaborated with the college admission team to gather requirements and develop a site-map, resulting in a visually appealing, user-friendly, and mobile-optimized platform for high school students seeking college admission support

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

EDUCATION

Hack Reactor, *Advanced Software Engineering Certificate*

Sept 2022 - Feb 2023

Coursera, *Google Data Analytics Professional Certificate*

May 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