YI CHEN
SOFTWARE ENGINEER | PMP | MBA

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SKILLS

- **Programming Languages** Javascript ES5/ ES6+, Python3, Java, TypeScript, Visual Basic, HTML 5, CSS 3, SCSS
- **Frameworks & Libraries** MERN Stack (React, React-Redux, Redux Toolkit, Express.js, MongoDB, Mongoose, Node.js), Next.js, jQuery, Sequelize, Flask, SQLAlchemy, Django REST framework (DRF), Djoser, WTForms, Pandas, Material UI, Figma, Bootstrap, Tailwind CSS, Prisma
- **Databases & API Development** RDBMS, SQL, NoSQL, SQLite 3, MySQL, PostgreSQL, pgAdmin, MS SQL Server, RESTful API, Amazon Web Services (AWS), Webpack, Firebase, Google Map API, JSON, JWT, Middleware
- **QA Testing** Maven/JUnit, API testing (Insomnia/Postman), Unit & Integration testing (Mocha/Jest/Cypress), Playwright
- **Functional** UI/UX Design, Git Version Control, Test-Driven Development (TDD), Object Oriented Programming (OOP), Data Structures and Algorithms, ORM (Object-Relational Mapping), Agile Development (Scrum) Methodologies, Jira, GUI, Cloud Computing Basics, CDN (Content Delivery Network), Project Deployment (Heroku, Render, Cyclic), Web Performance Optimization, VS Code, Atom, IntelliJ, PyCharm, OAuth, Docker, Stripe, Power BI

PROJECTS (more)

Moment | (ReactJS, Redux, Python3, JavaScript, Flask, SQLAlchemy, Bootstrap, AWS S3, PostgreSQL)   Oct 2023 - Current
Online Social Platform for Sharing Information, Engaging in discussions & Fostering connections.   **[live](#)** | **[github](#)**

- Efficiently implemented AWS S3 integration to facilitate smooth multi-image uploads and updates for user posts, resulting in an enhanced user experience and strengthened data security. Refactored code in adhering to the DRY (Don't Repeat Yourself) coding principle.
- Designed a well-structured relational database schema using SQLAlchemy and Alembic migration tool to achieve efficient data organization and retrieval.
- Designed and developed critical API endpoints using Python and Flask to facilitate database interactions and implemented API testing using Postman, resulting in improved application performance and maintainability.
- Designed and developed a dynamic, responsive single-page application using React, developing and managing asynchronous APIs and creating reusable components to deliver an optimal user experience.
- Architected the frontend Redux store structure with a focus on preventing muted state and eliminating data collisions, ensuring predictable and reliable DOM rendering.

Petsy | (ReactJS, Redux, HTML5, Python3, JavaScript, Flask, SQLAlchemy, CSS3, PostgreSQL)   Sept 2023 - Current
An Online Retail Platform Specializing in the Sale of Pet Products.   **[live](#)** | **[github](#)**

- Leveraged Figma for UI/UX Design and led the development of project wireframes, significantly contributing to the visualization and frontend development of the project.
- Demonstrated the ability to work autonomously and successfully implemented a complex search feature using React, Flask, SQLAlchemy, resulting in enhanced project functionalities and an improved user experience.
- Engineered database models and integrated Flask form validations to uphold the integrity and security of user data, which minimized the likelihood of errors and data breaches, ensuring a secure and smooth user experience.
- Collaborated closely with a team member to develop, debug, and troubleshoot complex tag functionalities within a demanding 2-day timeframe. Demonstrated effective teamwork, debugging and problem-solving skills, and the ability to work under pressure.
- Coordinated with the team to implement a streamlined Git and pull request process to prevent merge conflicts and optimized development workflow, substantially contributing to project debugging and overall success.

Little Lemon Restaurant | (Python3, Django DRF, Djoser, Insomnia, MySQL, React, CSS, JavaScript)   Jan 2023 - Dec 2023
Table Booking System   **[github](#)**
Online-based Order Management System API   **[github](#)**

- Proficiently utilized Django REST framework to streamline API development, ensuring efficient serialization of database models, seamless data conversion and validation, and effective control over access permissions.
- Configured and set up a MySQL database for the table booking system, establishing a robust connection between the back-end and the database.
- Utilized Djoser, a token-based user authentication library, to authenticate users and generate auth tokens, which enhances system security.

- Implemented automated unit testing utilizing Insomnia, a comprehensive API testing platform, to ensure the seamless functionality of the developed APIs, ensuring a reliable and resilient system.

Y.CHEN Design | (JavaScript ES5/ES6, HTML5, CSS3, Bootstrap, MailChimp API, Express)   Oct 2022 - Current
A Frontend Project Dedicated to UI/UX Design for a Web-based Designer Fashion Store   live | github
- Implemented robust form validations using JavaScript and regular expressions to ensure secure and accurate user input, enhancing the overall reliability and security of the system.
- Enabled Newsletter Subscription functionalities using JavaScript and by integrating the Mailchimp API, and utilized Express.js and Body-Parser for efficient page routing.
- Designed and developed an interactive carousel by manipulating JavaScript DOM and integrated modern CSS styling to enhance user experience.

EDUCATION
- **App Academy Software Engineering Bootcamp** - *24 Week (1500+ hrs) Full-Time*   October 2023
- **University of California, Berkeley** - *Master of Science in Civil Engineering & Project Management*   May 2017
- **California Institute of Advanced Management** - *MBA in Executive Management*   April 2022
- **Zhengzhou University** - *Bachelor of Engineering in Civil - Water Resources Engineering*   June 2015

LICENSES & CERTIFICATIONS (more)
- **PMP (Project Management Professional Certificate)**   February 2021
- **Meta Back-End Developer Professional Certificate**   December 2023
- **Meta Front-End Developer Professional Certificate**   February 2023
- **The Complete Web Development Bootcamp Certificate - Udemy**   February 2023

EXPERIENCE
SELF-DIRECTED CAREER TRANSITION THROUGH FOCUSED LEARNING & PROJECTS   *June* 2022 - April 2023
- **Programming with Python 3**
  - Studied OOP, GUI, File Handling with Pandas Library, Web Scraping
  - Completed projects in Python 3 such as Black Jack Game, Snake Game, Pong Game, Turtle Crossing Game, Flash Card App, Password Manager GUI App with Tkinter, Stock Trading News Alert Project.
- **Full Stack Development**
  - Studied JavaScript, HTML, CSS, jQuery, MERN Stack, Ajax, Axios, RESTful API, and SQL/NoSQL databases.
  - Completed projects such as Note Keeping App (React, Material UI), Travel Tracker App (postgreSQL, pgAdmin, Express.js, EJS templating), Portfolio Site (React, Redux-toolkit, googleMap API).

INNOVATIVE PROJECT SOLUTIONS **- Project Engineer**   Mar 2021 - Nov 2021
- Conducted thorough quality assurance checks on project drawings, correcting design errors and discrepancies, leading to substantial cost savings and reduced potential legal liabilities
- Carried out the estimation of project costs, developed project schedules, and managed the bidding process, which resulted in project awarding.
- Worked as the Lead Project Engineer for the newly opened QA/QC department, overseeing drawings and designs from the engineering team. This responsibility was assigned to me based on my excellent performance during the QA/QC and pre-construction phases of projects.
- Proactively identified and addressed scope gaps to ensure thorough project scope coverage during project procurement, trained project interns, led the process of subcontractor bid solicitation, evaluation, and negotiation, leading to significant cost savings and ultimately, the project's successful procurement.

GIAMPOLINI **- Project Engineer**   Oct 2017 - Dec 2020
- Innovated a digital purchase order generation and tracking system through Excel VBA Macros, which enforced data validation, empowered users to manipulate and analyze data, and create custom user forms, reports, and charts.
- Performed project cost estimation, evaluated project cost trends, analyzed the Estimate at Completion (EAC), and visualized project expense data using data analytics tools in Excel. These efforts facilitated upper management in making informed decisions and maintaining control over project costs.
- Successfully resolved contract disputes, negotiated Change Orders for a better value, rejected unreasonable back-charges and accusations of delays by utilizing knowledge in contract law, resulting in significant cost savings.
- Managed and provided leadership for a multi-million dollar Design-Build OSHPD 3 medical building project, proposed engineering solutions that effectively mitigated potential project delays and additional expenses.