

Kelan Wu

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Experience

Paycom May 2024 – August 2024
Software Development Intern Dallas, TX

- Developed a solution for the CRM department of 50+ employees to extract data & generate custom reports.
- Built a UI for users to create complex SQL queries using React.js, TypeScript, Material-UI, & Paycom framework.
- Designed a modular filter unit enabling users to customize SQL WHERE clauses, handling 20+ concurrent filters.
- Asynchronously processed messages between Couchbase DB & PHP back-end using RabbitMQ consumer service.
- Received outstanding praise from Paycom's CIO for our project and was selected to be deployed into production.

RoviSys February 2024 – May 2024
Software Co-op Houston, TX

- Decreased data conversion process time by 95% by developing an automation CLI tool using Python & pandas.
- Constructed 50+ system processes for 10 companies, increasing data analysis speed by 30% with AVEVA PI.
- Utilized PI System Explorer to proficiently map 100+ tags, enabling efficient data organization within processes.

Houston Learning Algorithms Lab (HULA Lab) May 2023 – August 2023
Summer Undergraduate Research Fellow Houston, TX

- Selected as one of 60 students for the SURF program, researching the potential of providing therapy using LLMs.
- Engineered a MySQL database of 2,000+ therapy sessions, real and AI, by using Python, GPT-4, and LLAMA-2.

Projects

V Street Trading | *TypeScript, React.js, Django, MongoDB, Vite.js*

- Developed a full-stack stock market simulator for users to practice trading on U.S., FOREX, and Crypto markets.
- Integrated an AI-powered financial advisor chat bot by leveraging GPT-4o to provide trading advice to users.

AI Age Detection | *Python, TensorFlow, pandas, NumPy*

- Developed an image-based model using deep learning with TensorFlow and pandas to detect the age of a person.
- Achieved 85% accuracy in age detection by using a Convolution Neural Network and data augmentation.

Lumina Archives Library Application | *JavaScript, React.js, Express.js, MySQL, MySQL Workbench, Azure*

- Developed a REST API using Express.js with 60+ endpoints to perform CRUD operations on a MySQL database.
- Automated data integrity checks and processes in MySQL DB by implementing 30+ triggers and 2 cron jobs.

Resource Visualization | *JavaScript, Python, Flask, pandas, beautifulsoup*

- Built a Flask web app to handle, monitor, & display industry petroleum-related datasets for CodeRed Hackathon.
- Extracted & compiled 100+ datasets in 1 minute leveraging Python, pandas, & beautifulsoup.

Education

University of Houston December 2024
Bachelor of Science in Computer Science, Minors in Mathematics

- GPA: 3.5/4.0
- **Coursework:** Algorithms & Data Structures, OOP, Database Systems, Software Design, Software Engineering, Artificial Intelligence, Data Science, Machine Learning, Discrete Math, Statistics, Networks

Technical Skills

Programming Languages: Java, Python, JavaScript, TypeScript, C++, HTML, CSS, R, SQL, PHP

Frameworks: React.js, Redux, Material-UI, Express.js, Flask, MySQL, PostgreSQL, MongoDB

Technologies: Git, GitLab, VS Code, Jira, Postman, Azure, MySQL Workbench, Vite, Jupyter Notebook