UNIVERSITY OF WATERLOO

Kellan Jiang

437-993-1773   kuang.jiang@uwaterloo.ca
linkedin.com/in/kuang-jiang/   unikerogen.github.io

SUMMARY

Full Stack Web Developer with a Master's in Electrical Engineering and a strong focus on web development, API integration, and database management. Proficient in Python, Java, JavaScript, HTML, CSS, and various frameworks. Experienced in designing user-friendly interfaces, implementing automated testing, and managing CI/CD pipelines.

EXPERIENCE

DingSheng Garment Company   Mar 2023 - Aug 2024
Software Engineer   Remote

- Developed and maintained **web applications** using **JavaScript** frameworks (React, Angular), enhancing user experience and responsiveness.
- Designed and implemented **RESTful APIs** with **Node.js**, ensuring seamless integration between front-end and back-end systems.
- Managed **PostgreSQL** databases, optimizing data storage and retrieval processes to improve application performance.
- Implemented **CI/CD pipelines** using **Jenkins**, automating deployment processes and reducing manual intervention by **50%**.

Bell's Welding and Mechanical Repair   Dec 2019 - May 2021
Software Engineer   Pennsylvania, United States

- Engineered an **ETL pipeline** in **Python** with **PySpark**, increasing workflow efficiency and improved data accuracy by **50%**.
- Conducted **50+** user interviews to develop **automation** scripts with **Shell**, **Python**, and **SQL**, improving overall user satisfaction and reducing manual workloads.
- Authored comprehensive technical **documentation**, which reduced customer-related queries by **90%** and facilitated better understanding and usage of the software systems.

PJM Interconnection   Jan 2018 - Aug 2018
Software Engineer   Pennsylvania, United States

- Led **testing** initiatives for management software, enhancing **user experience** and **software performance**.
- Developed **50+ unit** and **integration tests** in **Python** to identify critical bugs, thus improving the reliability of the software.
- Authored technical documentation and proposed project improvement plans, leading to enhanced project efficiency and clarity.

PROJECTS

Money Flow   Mar 2024 - Present
Project Leader   Toronto, Ontario, Canada

- Utilized **Swift** and **Core Data** to persistently store and retrieve transaction data, ensuring data integrity and efficient querying. Implemented complex data relationships to model financial transactions accurately.
- Designed a **user-friendly interface** prioritizing intuitive navigation and clear data visualization, featuring category selection, transaction search, and insightful reports.
- Ensured **data security** and implemented **data migration** techniques to handle future app updates, maintaining data integrity across different versions of the app.

Kuang's Place   Mar 2020 - Present
Personal Project   Toronto, Ontario, Canada

- Applied design best practices to **website development**, resulting in a **50%** increase in user engagement.
- Utilized **Python APIs** and **JSON** for dynamic content retrieval, streamlining workflows and improving efficiency by **90%**.
- Developed a **CMS** in **Python**, implementing user-centric interface designs that enhanced user experience and facilitated easier content updates.

EDUCATION

University of Waterloo   May 2021 - Dec 2022
Electrical Engineering | Master | Focusing Field: Machine Learning and AI & Software   Waterloo, Ontario, Canada
GPA: 3.8/4.0
Related Coruses: AI, Algorithm Design, Optimization, Data Analysis, Data Structure, Software Testing/Quality Assurance

Temple University   Aug 2015 - Dec 2019
Electrical Engineering | Bachelor | Minor: Physics   Philadelphia, Pennsylvania, United States
GPA: 3.8/4.0
Awards: Dean's List for all semesters, Honor Student

SKILLS & LANGUAGES

- **Software**: JavaScript, Node.js, React, HTML, CSS, SQL, Swift, C/C++, Python, Java, MATLAB, Docker, Git, Shell
- **Tools**: Core Data, Jenkins, GitHub Actions, Amazon Web Services, Microsoft Azure, Google Cloud Platform
- **Languages**: Chinese Mandarin (Native), English (Proficient)