Kellan Jiang

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SUMMARY

Master's in Electrical Engineering with extensive experience in software engineering, specializing in web development, API integration, and database management. Proficient in Python, C/C++, HTML, CSS, JavaScript, Git, and Jira. Skilled in designing user-friendly interfaces and implementing automated testing and CI/CD pipelines.

EXPERIENCE

DingSheng Garment Company   Mar 2023 - Aug 2024

Software Engineer   Remote

- Utilized **Java** for **ETL processes** with **PostgreSQL**, improving data quality by **50%**. Designed and maintained complex data workflows to enhance operational efficiency.
- Developed **unit tests** with **JUnit** to ensure data consistency and reliability, reducing data error occurrences by **60%**.
- Implemented and managed **CI/CD pipelines** using Jenkins, reducing manual testing efforts through **automation** and improving deployment speed by **40%**.
- Integrated **AI** models to analyze security camera footage, enabling real-time **object detection** and improving overall security measures.

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 and a more intuitive user experience.
- Utilized **Python APIs** and **JSON** for dynamic content retrieval, streamlining workflows and improving efficiency by **90%**.
- Developed a **content management system** 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**: C/C++, Python, Java, JavaScript/TypeScript, HTML, CSS, SQL, Swift, MATLAB, Docker, Git, Shell
- **Tools**: AutoCAD, SolidWorks, OpenCV, Jenkins, Amazon Web Services, Microsoft Azure, Google Cloud Platform
- **Languages**: Chinese Mandarin (Native), English (Proficient)