KEVIN (ZHENGKANG) CHEN

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PROFESSIONAL SUMMARY

Software Engineer with 2 years of experience in backend development, API integration, and full-stack design using Python, JavaScript, C++ and Java. Skilled in leading Agile projects, building scalable applications, and leveraging cloud technologies like GCP. Proactive team player with strong problem-solving abilities, dedicated to continuous improvement and driving collaborative success.

EDUCATION

University of Waterloo   **Sep. 2023 – Sep. 2024**
Master of Electrical and Computer Engineering, Specialized in Software Engineering, GPA:83.88%   *Waterloo, Ontario, Canada*

McMaster University   **Sep. 2018 – Apr. 2023**
Bachelor of Electrical and Computer Engineering (Co-op), GPA:10.5/12, Dean's Honor List   *Hamilton, Ontario, Canada*

PROFESSIONAL EXPERIENCE

Co-Founder & Development Lead | *ReactJS, Django, Figma, Tailwind, PostgreSQL, Python*   **Apr. 2024 – Present**
Galactic Innovators Group   *Remote*

- Collaborated with stakeholders to gather and refine requirements, translating business needs into technical specifications and actionable tasks, ensuring timely delivery using **Agile** methodologies.
- Led the design and implementation of an E-Commerce web application system using Model-View-Template design pattern with **Django**, **React** with **Redux** for state management, **Figma** and **Tailwind CSS** for UI design to create optimized user journeys, including product browsing and cart management.
- Deployed the web application on **GCP** Cloud Run and cloud **PostgreSQL**, enhancing performance and reliability while managing cost efficiency through scalable operations.

Backend Software Engineer: Contract | *Flask, GCP, Git, PostgreSQL, MongoDB, Docker*   **May 2024 – Sep. 2024**
Pronti AI   *Waterloo, Ontario, Canada*

- Designed and implemented **RESTful** API endpoints for mobile app using **Flask**, **GCP**, **PostgreSQL**, and **MongoDB**, contributing to a 10% increase in user engagement.
- Collaborated with frontend mobile engineer to troubleshoot **Flask-based** APIs, reducing APIs response time and app down time by more than 30%.
- Maintained and optimized a Multi-Layered Comparison Network (MCN) model with the ResNet-50 backbone convolutional neural network architecture for personalized outfit generation, streamlining model outputs directly to the mobile app.
- Containerized the entire backend infrastructure using **Docker**. Created Docker images, stored them in Google Cloud Storage, and utilized **GCP Cloud Run** to run the Docker images, enabling streamlined deployment and improved scalability for the backend services.
- Developed **End-to-end** testing strategies with **PyTest**, optimized **CI/CD** workflows with **Google Cloud Build** and **GitHub Actions**, and created technical documentation with **Swagger**, enhancing deployment efficiency, system reliability and maintainability.

Digital Automation Engineer: Internship | *Python, Pandas, C, SVN, Bash, Perl*   **May 2021 – Sep. 2022**
The Six Semiconductor Inc.   *Markham, Ontario, Canada*

- Architected and implemented Python-based automation checkers integrated with CMake build systems, reducing error detection time by 40% and increasing team productivity.
- Enhanced data processing workflows by developing Python scripts with the **Pandas** library for automated data scraping, parsing, and correction, integrated with **HTML** views for data visualization.
- Optimized development operations by implementing advanced **SVN** version control strategies and automating deployment processes with **Bash** and **Perl** scripts using **CMake**.

PROJECTS

AI-powered E-Commerce Web App: Team Leader | *Django, React JS, MySql*   **Jan. 2024 – Apr. 2024**

- Conducted market analysis and user interviews to gather requirements, translating insights into technical specifications.
- Architected and developed a **React** and **Django-based** platform, implementing user-based and item-based collaborative filtering for personalized recommendations.
- Implemented **OAuth 2.0** authentication with **JWT** for secure user sessions, ensuring reliable access control.
- Engineered **End-to-end** automated testing using **Pytest** and **Jest**, achieving 85% code coverage and improving code quality.

SKILLS & COMPETENCIES

Programming skills: Python, JavaScript, C++, C, Java, TypeScript, ReactJS, Django, Flask, REST API, Figma, Tailwind, NoSQL, SQL, GitHub Actions, End-to-end testing, Pytest, Jest, Docker, Git, SVN, Postman, Jira
Soft Skills: Effectively communicate complex technical concepts through clear documentation and presentations, manage development tasks efficiently, apply analytical thinking to solve challenging problems and optimize code, and foster strong collaboration within cross-functional teams.