KENNY CHEN

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Education

University of Toronto

Honours Bachelor of Science in Computer Science, Co-op   *Expected December 2025*

Work Experience

TheScore Media and Gaming, Inc.   **May 2022 – December 2022**

QA Automation Engineer Co-op   *Toronto, ON*

- Engineered automated testing scripts in **Kotlin** leveraging **Appium** and **JUnit**, to enhance testing efficiency for Android and iOS mobile applications
- Pioneered the adoption of **Selenium Webdriver** for automating web application testing, achieving 100% automation of smoke test suites and improving regression testing for the platform by 5% per sprint
- Deployed and monitored automation test reporting and monitoring through **Jenkins**, and reported testing results to development and QA teams, contributing to informed decision-making in release meetings

Projects

Systemwise.ca | *MongoDB, Express, Angular, Node.js, TypeScript, GCP, Nginx, LangChain*   **May 2024 – Present**

- Engineered schemas for objects in **MongoDB** database, integrated seamlessly with front-end application by implementing **RESTful** API endpoints
- Implemented access control using cookie-based authentication, integrating OAuth2.0 for a seamless auth experience
- Prompt engineered back-end worker process to implement a robust, accurate AI grading system based on **Generative AI**, interacting with **LangChain** to make requests to OpenAI's API
- Deployed application on **Google Cloud Platform**, Implemented and managed a reverse proxy setup using **Nginx and Docker**, efficiently routing network traffic and improving system scalability

LiteMacros | *TypeScript, PostgreSQL, React Native, Express, iOS, Android*   **August 2024 – Present**

- Designed and engineered a **full-stack Android and iOS mobile application** in **React Native** enabling users to log daily macro-nutrient intake.
- Engineered database schemas for **PostgreSQL** and interacted with database using RESTful **Express** APIs to efficiently manage user data, foods, and macro-nutrient information.
- Composed and managed **technical documentation** to ensure streamlined, unambiguous development process.
- Collaborated in a team of 3 to execute the project in iterative sprints, aligning with **Agile Methodologies**.

LangchainJS | *TypeScript, Open Source, Generative AI*   **October 2023 – November 2023**

- Engineered Memory modules in the LangChainJS open-source library, enabling **1,000,000+** developers to store past transactions with **Generative AI Agents** in memory based on native tokenization mechanisms
- Designed and implemented unit tests ensuring module reliability, and collaborated with maintainers to ensure code meets functional and stylistic requirements
- Improved technical documentation, enhancing code maintainability, facilitating onboarding processes for developers.

PintOS | *C, Operating Systems*   **May 2023 – August 2023**

- Implemented thread synchronization by integrating priority donation, improving process scheduling efficiency and reducing response times.
- Engineered exponential file growth by optimizing file pointer management, enabling dynamic file expansion.
- Optimized memory management by implementing on-demand paging with LRU algorithm, reducing page faults and enhancing system responsiveness.
- Streamlined user program execution by abstracting system calls from the user space to the kernel, ensuring efficient and thread-safe interactions via mutexes.

Technical Skills

Languages: Python, Java, Kotlin, C, JavaScript, TypeScript, Bash, HTML, CSS
Technologies/Frameworks: Git, React, React Native, Angular, Node.js, PostgreSQL, SQLite, MongoDB, Sass, Google Cloud Platform, AWS EC2, Bootstrap, TailwindCSS, PKI, TLS, HTTP