KangHao Lin

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Professional Summary

Full-stack software engineer with a strong foundation in JavaScript, TypeScript, Python, and React, and hands-on experience building web and mobile applications end to end. Demonstrated ability to architect RESTful backends, integrate third-party APIs, and deliver polished front-end experiences. Experienced leading Agile teams and shipping production-quality software.

EDUCATION

University at Buffalo, SUNY

Bachelor of Science, Computer Science. GPA: 3.84. *2025-05*

EXPERIENCE

World Endurance Software Engineer Intern

Global Resource & Technology Development Inc. — WorldEndurance.ai Aug 2026 – Nov 2026

- Optimized worldendurance.ai homepage performance as data grew to 15k+ past races, replacing a per-load query in pastStats() with SQL aggregates + caching, load time dropped from ~24s to ~2–4s (~88% faster).
- Led Contributed to crawler development and data management for WorldEndurance.ai, supporting ingestion and operation of 18,800+ race records across multiple countries.
- Resolved a production outage (error 1040) traced to a full disk; freed storage and added a weekly cleanup cron.

Project Manager

Coder-Focused Message Board (Software Engineering Project*)*

- Designed and developed a scalable message board with public and private community features, supporting concurrent user interactions and low-latency message delivery.
- Led Agile sprints via Trello with cross-functional teams to ship high-quality software and feature integration.

PROJECTS

LyricFlow Chrome Extension https://github.com/kanghaol/lyricflow

React, TypeScript, Vite, Chrome APIs

- Published Manifest V3 Chrome extension displaying synchronized Spotify lyrics as an overlay across active browser tabs.
- Synchronized cross-tab state via a Background Service Worker to broadcast playback updates to isolated React components.
- Implemented debouncing and chrome.storage.local caching to minimize LRCLIB API calls and ensure zero-lag lyrics loading.
- Prevented CSS conflicts on host websites by injecting the UI into a Shadow DOM.

Movie Recommender System

Full-Stack: Python, PyTorch, Flask, React, TailwindCSS, Scikit-learn, MongoDB, Docker

- Engineered a content-based movie recommendation system matching user preferences across a dataset of thousands of films using TF-IDF vectorization and cosine similarity.
- Preprocessed metadata including genres, cast, and keywords to systematically compute feature vectors.
- Integrated the TMDB API to dynamically fetch and render movie posters, enhancing the user search experience.
- Built a front-end search interface backed by MongoDB for efficient querying across thousands of movie entries.

Schedule-Sync

Full-Stack: React, PHP, MySQL

- Developed a scheduling platform for businesses, streamlining booking workflows and eliminating manual administrative tasks.
- Secured user data via token authentication with bcrypt password hashing and CSRF token validation.
- Prevented SQL injection using parameterized queries and optimized database performance.
- Deployed robust full-stack architecture with React, PHP, and MySQL on Apache servers.

Anime Pilgrimage Mobile App

Full-Stack Mobile development: Expo, React Native, Express, MongoDB

- Built a full-stack mobile app using Expo and React Native that connects anime storytelling with real-world geographic locations.
- Integrated RESTful APIs to fetch and display pilgrimage location data from an Express.js and MongoDB backend.

SKILLS

Languages: JavaScript, TypeScript, Python, Java, C, Scala, PHP, HTML, CSS

Frameworks & Libraries: React, React Native, Next.js, Express.js, Flask, PyTorch, Pandas, Scikit-learn, NumPy

Databases: MongoDB, MySQL, phpMyAdmin

Tools & Methodologies: Git, Docker, CI/CD, Agile, Scrum, Nginx, Apache, Digital Ocean, IntelliJ IDEA, Visual Studio