Brian Seo

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Full-Stack Developer | Software Engineer

EDUCATION

University of California, Irvine   Irvine, CA
Bachelor of Science   Expected June 2026
Major in Software Engineering
Relevant Coursework: Data Structure Implementation and Analysis, Algorithm Design and Analysis, Database Management
    System, Software Testing & Quality Assurance, Concept in Programming, Computer Architecture & Organization,
    Interactive Software, Discrete Mathematics, Linear Algebra

TECHNICAL SKILLS

Coding Languages| C/C++, GoLang, Python, Java, JavaScript, Typescript, HTML, CSS, SQL
Technologies| Node.js, Next.js, React.js, Tailwind CSS, MySQL, PostgreSQL, Version Control, GoogleTest, Xcode, MongoDB,
Supabase, Railway, API, Docker, Kubernetes, AWS, Vercel, Microservices, Unix/Linux
Other Skills | API Development, Dynamic Routing, Email Integration (Nodemailer), Twilio, Responsive Design

PROJECTS

Personal Website   Dec 2024 - Present
                                        Next.js | React.js | JavaScript | HTML | Tailwind CSS | Vercel | Git
- Developed a **fully responsive portfolio website** using **Next.js 14** and **Tailwind CSS**, ensuring seamless layouts across all screen sizes.
- Implemented **dynamic routing, smooth scrolling, and fade-in animations** to enhance user experience.
- Managed smooth animated transitions period to ensure Light/Dark mode transit naturally
- Integrated RAG on interactive LLM; stored context in JS data arrays rather than a DB due to small volume of data; organized code across separate JS files.

Fabflix (Decurb): Full-Stack Movie Web Application   Mar 2025 - June 2025
                            Java | Servlets | HTML | CSS | JavaScript | MySQL | Docker | Kubernetes | AWS | Git | Microservices
- Designed and implemented RESTful microservices, containerized with Docker, and orchestrated deployment on AWS Kubernetes, enabling scalable, modular architecture.
- Manage the **scaling on pods and optimized specification of YAML** file to minimize the cost of deployment in AWS while maintaining the performance.
- Automated **data import** by parsing **XML files** and loading movies, stars, and genres into the database; optimized DOM-based parsing and batched PreparedStatements to **reduce load latency by ~26%.**
- Managed instance type to **ensure** there is **no packet loss during large amounts of processing data.**
- Integrated an **AI-powered chatbot** using **LLM model** to improve user experience of flexibility and accessibility in searching movies. Added intent based to ensure if the question is not relatable to the user, gives recommendation in searching.
- Built dynamic **AJAX-powered front-end** for **movie browsing**, **autocomplete**, and **interactive cart**; optimized search bar with **Levenshtein-based fuzzy matching** and **efficient database queries**.
- Managed full **project lifecycle**: **requirements gathering**, **system design**, **database schema**, **implementation**, **debugging**, and **production deployment** with **SSL** and **auto-scaling**.

Rent-Spiracy   Apr 2025
Hackathon team Project
                                Next.js | JavaScript | python | Tailwind CSS | HTML | Node.js | MongoDB | API | Vercel | Git
- Developed **Rent-Spiracy**, a real-time web application that detects rental scams using AI and database validation.
- **Implemented multi-language** support to make the platform accessible to international users
- Integrated **Gemini API** to perform scam analysis based on user-provided emails, phone numbers, and documents.
- **Analyzed cost of tokenization, reduced overall budget** by shifting from Gemini API to Jina AI API for fetching content.
- Designed and implemented **backend services** with **Node.js** and **MongoDB** to securely store and retrieve scam-related data.