Jason Jonghyuk Lee

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EDUCATION

Brigham Young University   Dec 2025
Bachelor of Science, Computer Science   Provo, UT
- 1st Place Winner in the 2024 BYU ACM YHack with Benny Award.
- 1st Place Winner in the 2024 BYU PMA Hackathon.
- Tech President: Korean Business Student Association, Member: BYU Association for Computing Machinery (ACM).

SKILLS

- Tech Stack: Python, JavaScript, TypeScript, SQL, Java, C++, React.js, Next.js, FastAPI, Node.js, Vue.js, Express, PostgreSQL, Amazon S3, DynamoDB, Supabase, MySQL, MongoDB, AWS EC2, Nginx, Git.

EXPERIENCE

iLabz   Aug 2023–Present
Software Engineer   Provo, UT
- Optimized application performance by decreasing redundant API calls by 30%, resulting in a 1-second decrease in load time, which streamlined approach lowered server costs and enhanced user experience, using **React.js.**
- Successfully resolved over 60 compatibility issues and performance bottlenecks introduced by the **Vue.js** upgrade, resulting in a 20% reduction in load times.
- Leveraged WebSocket technology to create a real-time trading system that enables users to initiate and accept trading requests.
- Reduced task completion time by 25% while improving product quality by establishing a collaborative team structure, using **Github**.

Glod-AI   Jun 2024–Aug 2024
Full Stack Software Engineer   Provo, UT
- Reduced media processing time by 28% by integrating OpenAI Text-to-Audio and dubbing APIs, building a video merging API with **Python** and **FastAPI**, and developing a **RESTful API** for streamlined content delivery and management.
- Improved user experience and increased subtitle accuracy by 34% by designing and integrating UI for review page customization using **Next.js(React.js)** and constructing a subtitle API with OpenAI Audio-to-Text.
- Cut down API testing costs by 92% through the development of efficient and test functions, conducting end-to-end testing, and resolving critical bugs using **Python**.
- Leveraged an open-source library(**Moviepy**) to overcome the complexities of synchronizing text, audio, and video, resulting in a robust and customizable video generation process, using **Python.**

BYU Korean Business Student Association (https://www.byukbsa.org)   Aug 2023–Present
Tech Team Lead   Provo, UT
- Built an online platform allowing Korean students to share information and seek assistance through a blog and authentication system, utilizing **React.js, Express.js, TypeScript, PostgreSQL, TailwindCSS, Amazon S3, Google Auth**, and **MongoDB**.
- By scaling server resources by 50%, we were able to handle a 30% increase in website traffic.

PROJECT

Swift Shorts - AI Shorts Generation and Video Analytics Tool (2024 BYU ACM YHack 1st Place Winner)
- Project Demo: https://www.youtube.com/watch?v=oy6Oik1Os6c.
- Automatically created 3 short videos from a long one by operating an algorithm to identify the most engaging parts, using **Python.**
- Resolved a critical issue with a misconfigured Google Document API, salvaging the project by successfully integrating the API through extensive parameter adjustments.
- Integrated the analysis results into a user-friendly interface for easy video editing, using **React.js, TailwindCSS.**

Find My Housing (https://www.findmyhousings.com/)
- Boosted user engagement by 22% by developing and implementing a Google Maps integration using **React.js**, displaying over 140 housing locations with interactive markers, and engineering a modal system for detailed information on marker clicks.
- Experienced significant user growth, attracting over 2,000 users since its launch.

Skill Gap Analyzer - Career Development Tool (BYU PMA Hackathon 2024 - 1st Place Winner)
- Developed a skill gap analysis tool to help users identify skill deficiencies and receive personalized learning recommendations.
- Leveraged OpenAI to dynamically generate questions, scored user responses with AI, and visualized user performance in a pentagon chart resembling game-like ability stats, enhancing engagement and user experience.

G-TRAVEL - Gemini AI Travel Planner (2024 Google AI Hackathon Competition)
- Project Demo: https://www.youtube.com/watch?v=ambPHFr96l4.
- Developed a travel planning application utilizing the Google Gemini API and integrated Booking.com, Skyscanner, and Tripadvisor APIs, offering users a comprehensive, real-time solution for hotels, flights, and attractions, enhancing decision-making, using **React.**
- Engineered the application with **Node.js** and **React.js**, creating a streamlined, user-friendly interface for itinerary management.