

Justin Lee

San Jose, CA | 415-965-9148 | justlee888@gmail.com | github.com/Jjmaxxx | linkedin.com/in/lee-justin-j

EDUCATION

San Jose State University

Bachelor of Science in Computer Science - 3.73/4.0

San Jose, CA

Expected Dec. 2025

EXPERIENCE

Lead Software Engineer

Sep. 2024 - Current

Arctex

Remote

- Dockerized and deployed CollegeAppAssist, a MERN app using AWS Fargate and ALB for scalable hosting, resulting in stable performance and reliably serving 25,000+ daily requests with Cloudflare-enabled protection.
- Built a CI/CD pipeline using GitHub Actions to automate deploying to AWS Fargate, eliminating the need for manual intervention and saving 5+ minutes per deployment, accelerating development iteration.
- Designed a flexible MongoDB schema to efficiently store large amounts of variable HTML ID fields across multiple websites, supporting over 100 top-level attributes and deeply nested structures for consistent data querying.
- Integrated infrastructure for payment workflows, including Stripe Webhooks to handle real-time transactions.

Backend Team Lead

Aug. 2023 - May. 2025

Association for Computing Machinery @ SJSU

San Jose, CA

- Scraped and cleaned 25,000+ raw data entries consisting of reviews, professor data, course information, and semester specific schedules to build a reliable dataset for Lenses, an SJSU Course Scheduler Application.
- Oversaw the development and refinement of a relational database using PostgreSQL that holds 12 tables and 30,000+ data entries.
- Developed a secure login system with Google OAuth, implementing token management and automatic refreshing.
- Designed and refactored 20+ RESTful API endpoints for CRUD operations using Django to replace inefficient data handling logic, reducing backend response times and improving maintainability across services.

Software Engineer Intern

Jun. 2024 - Dec. 2024

TheTypingSchool

San Francisco, CA

- Developed and implemented a leveling and seasonal rewards system for 50+ active users on TheTypingSchool, boosting engagement and progress.
- Integrated OpenAI's Batch API with node-cron to auto-generate 100+ monthly typing prompts, replacing manual content creation and enhancing challenge variety for increased user engagement
- Built an eye-tracking feature using WebGazer.js with a calibration screen to block typing when users looked down, reducing gaze-down events by 30%, improving learning outcomes and focus during typing challenges.

PROJECTS

Yelpin | *React.js, Express.js, Material-UI*

Jun. 2023 - Jan. 2024

- Created a full-stack web application designed to streamline decisions about where to eat by searching via user-provided values.
- Devised a visually appealing and intuitive user interface, allowing users to easily navigate through the application and access key features.
- Integrated Express.js to communicate between the front and back-end through HTTP requests. Leveraged the Yelp Fusion API to search for restaurants in a specific area.

Downloadable Youtube Player | *Electron.js, React.js, Node.js fs module*

Sep. 2021 - July 2022

- Full-stack desktop application designed to download YouTube videos and playback from within the app.
- Utilizes the user's local device storage to store videos, ensuring data persistence and offline access to content.
- Implemented functionalities for making playlists, moving videos between playlists, deleting videos, and renaming videos or playlists.

TECHNICAL SKILLS

Languages: Javascript, Python, Java, HTML/CSS

Back-end & Databases: Express.js, Django, Flask, PostgreSQL, MongoDB

Cloud & DevOps: AWS, Docker, GitHub Actions (CI/CD), GCP

Front-end: React.js, Next.js, Tailwind CSS