

# Hongsuh (Harry) Ahn

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## EDUCATION

**University of Southern California – Viterbi School of Engineering**  
B.S Computer Science | GPA: 3.61/4.0

Los Angeles, CA  
Dec 2026

## SKILLS

**Languages:** Python, JavaScript/TypeScript, Java, C++, Swift | **Frameworks & Libraries:** React/Next.js/React Native, Node.js, Express, FastAPI, Flask | **Databases:** PostgreSQL, MongoDB, SQLite, Supabase | **Cloud & Tools:** Git, Docker, Kubernetes, AWS, GCP, Vercel, Railway, Figma, Selenium | **Data/ML:** LLMs, LangChain, Hugging Face, PyTorch, TensorFlow, SentenceTransformers, FAISS, NumPy, Pandas, ETL, RAG, Vector Search, BI Dashboarding | **Natural Languages:** English (Fluent), Korean (Native)

## EXPERIENCE

<b>Founding Engineer</b> <i>Dayli</i>	May 2025 – Present Remote
<ul style="list-style-type: none"><li>Designed and implemented robust full-stack architecture utilizing <b>React Native, Next.js, and Supabase</b> to facilitate real-time, structured communication with <b>live data synchronization</b> across 3 platforms under <b>200ms latency</b>.</li><li>Built and optimized an <b>LLM-driven intent interpretation engine</b> for precise classification of natural language inputs and dynamic routing to relevant planning modules.</li><li>Delivered critical production features, encompassing seamless cross-platform deployment (iOS, Android, web) and robust <b>synchronization with cloud calendar APIs</b> for enhanced scheduling.</li></ul>	
<b>Full-Stack Software Developer</b> <i>USC University Advancement – Business Intelligence Team</i>	Feb 2025 – Sep 2025 Los Angeles, CA
<ul style="list-style-type: none"><li>Developed and maintained full-stack internal systems using <b>React, JavaScript, and Python</b>, enabling USC Advancement to process <b>\$500M+</b> in annual gifts across <b>10+ departments</b>, while ensuring data security and compliance.</li><li>Improved document retrieval speed by <b>60%</b>, saving staff <b>5+ hours weekly</b>, by developing a centralized <b>SharePoint hub</b> with custom SPFx web parts in <b>React and Handlebars</b>.</li></ul>	
<b>Founding Engineer</b> <i>MyLily.org</i>	Jan 2025 – May 2025 Los Angeles, CA
<ul style="list-style-type: none"><li>Co-founded and led full-stack development of an AI-powered special education platform, impacting <b>3000+ students across 13 school districts</b> by streamlining IEP tracking.</li><li>Engineered an innovative <b>AI-driven smart logging system</b> (voice/text/manual) automatically structuring multi-student/session data into standardized quantitative progress and qualitative memos.</li><li>Architected and built a robust data pipeline using <b>NLP, regex, and Pydantic</b> for efficient standardized IEP document parsing.</li><li>Implemented a secure, <b>HIPAA/FERPA-compliant backend</b> featuring <b>AES-256 encryption</b> to protect sensitive student data.</li></ul>	
<b>Software Engineering Intern</b> <i>Qraft Technologies</i>	Jun 2023 – Sep 2023 Central, Hong Kong SAR
<ul style="list-style-type: none"><li>Automated daily stock allocation data processing using <b>Python, Selenium, and Jupyter</b>, building reusable <b>ETL pipelines</b> that cut team workload by <b>~20 hours/week</b>, and boosting team productivity by <b>~35%</b>.</li><li>Streamlined data workflows by scripting automation tools to <b>extract, clean, and transform real-time stock allocation data</b> from AI-driven signals, processing <b>1M+ rows daily</b> with <b>100% accuracy</b>.</li></ul>	

## PERSONAL PROJECTS

<b>Semantic Music Analyzer</b>   <i>FastAPI, CLAP, TTMR++, FAISS, LLaMA2, Demucs, Next.js</i>	April 2025
<ul style="list-style-type: none"><li>Benchmarked semantic embeddings on <b>10K+ tracks</b> using CLAP and TTMR++ encoders.</li><li>Indexed embeddings in multi-vector FAISS for cross-modal similarity search, achieving <b>~85% retrieval accuracy</b>.</li><li>Generated natural language tags and summaries with LLMs, leveraging k-nearest-neighbor search.</li></ul>	
<b>TooLate.ai</b>   <i>Next.js, FastAPI, FAISS, SentenceTransformers, GraphQL, TogetherAI</i>	April 2025
<ul style="list-style-type: none"><li>Built an LLM-powered platform that analyzes and compares AI startup ideas against scraped multi-source data.</li><li>Engineered scrapers and ETL pipelines with randomized batching and rate-limit handling, extracting data on <b>10K+ startups</b>.</li><li>Used RAG with FAISS + SentenceTransformers for GPT-backed feedback on idea positioning and pivots.</li></ul>	
<b>Flexor</b>   <i>PostgreSQL, ExpressJS, ReactJS, NodeJS, WebSockets</i>	August 2024
<ul style="list-style-type: none"><li>Developed a full-stack social platform with real-time posting, alert systems, and user authentication.</li><li>Built scalable REST APIs and scalable backend designed for <b>100K+ users</b> with WebSocket-based syncing.</li><li>Improved engagement through polished UI/UX and reactive client-side rendering using pagination.</li></ul>	