

Jacky He — US Citizen

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WORK EXPERIENCE

Software Engineer

New York, NY

Clipp

Nov 2024 – Jun 2025

- Engineered ML-driven features and pipelines, enhancing system efficiency, user engagement, and content relevance in production environments.
- Developed scalable, full-stack applications using React, TypeScript, GraphQL, and Flutter, improving workflows and boosting operational efficiency by **30%**.
- Optimized data pipelines and architecture for low-latency, reliable performance in AI and high-traffic systems.
- Built and deployed a real-time chat platform (GetStream, Firebase, TypeScript) using an event-triggered design for instant client updates, supporting 500+ concurrent users.
- Automated testing and quality checks, achieving **90%+ branch coverage** for critical workflows, ensuring stability and maintainability in production releases.

Software Engineer

New York, NY

CAN International

Apr 2024 – Oct 2024

- Initiated and led development of a membership app with job search and event features, engaging 300+ users.
- Customized Azure Document Intelligence pipelines to extract structured job data (title, salary, qualifications), boosting downstream **automation efficiency by 40%**.
- Built Azure Functions triggers for real-time NLP updates, improving responsiveness.
- Integrated Firebase for low-latency storage and rapid access, supporting real-time analytics and app performance.
- Reduced avatar load time from **minutes to seconds**, greatly improving UI responsiveness and user experience.

PROJECTS

Personal Blog Platform

Full-stack web app for publishing and managing articles

Jun 2025 – Aug 2025

- Built a blogging platform with Node.js, Express.js, and MongoDB, featuring a public blog and admin CMS.
- Integrated Cloudinary image hosting, JWT authentication, and API rate limiting for security.
- Deployed on Vercel with markdown-to-HTML, SEO-friendly slugs, and reading time calculation, providing a secure, scalable platform capable of handling hundreds of visitors per day.

Audio Cloning

Developed SV2TTS model to replicate judge's voice

Aug 2023 – Feb 2024

- Developed an SV2TTS model for voice cloning, enabling personalized speech applications.
- Achieved 90% voice accuracy using UMAP & deep learning, improving synthesis quality.
- Optimized model efficiency by reducing system latency & improving AI accuracy.

TECHNICAL SKILLS

Programming: Python, TypeScript, JavaScript, C, C++

AI & Machine Learning: LLM, NLP, Transformer, TensorFlow, PyTorch, Scikit-learn, OpenCV, spaCy

Deployment & Optimization: CI/CD (GitHub Actions, Vercel), API optimization

Cloud & DevOps: AWS, GCP, Firebase, Microsoft Azure, Docker

Frontend & UI: React, React Native, Next.js, Flutter

Backend & Databases: GraphQL, Node.js, Jest, MongoDB, Django, Flask, SQL, MySQL

Developer Tools: Git, Datadog, Figma, VS Code, IntelliJ IDEA, PyCharm

EDUCATION

University at Buffalo, SUNY

Aug 2022 – May 2024

M.S. in Engineering Science (Artificial Intelligence)

GPA 3.37/4.0

University at Buffalo, SUNY

Aug 2018 – May 2022

B.S. in Computer Science