

JESSICA NGUYEN

jessicaknguyen04@gmail.com | [linkedin.com/in/jessicaknguyen04/](https://www.linkedin.com/in/jessicaknguyen04/) | github.com/jessicangu

EDUCATION

University of Houston, Houston, TX

Expected May 2026

Bachelor of Science in Computer Science, Minor in Mathematics

Colorado School of Mines, Golden, CO

Aug 2022 – Dec 2022

Coursework in Bachelor of Science in Computer Science

SKILLS

Languages: Python, C++, SQL, JavaScript, TypeScript, HTML/CSS

Frameworks: React.js, Next.js, Node.js, Express.js, Vite, Tailwind CSS, Django, PyTorch, HuggingFace

Tools: Git/GitHub, VS Code, PostgreSQL, MySQL, MongoDB, Google Colab, AWS, Azure

EXPERIENCE

Code Ninjas, Houston, TX

Dec 2024 – Present

Coding Instructor

- Taught weekly coding classes to 30+ students ages 6-14, guiding them from block coding to JavaScript syntax while fostering critical thinking and problem-solving through game development projects
- Led immersive camps in Minecraft/Roblox modding, robotics, and creative engineering, creating engaging, student-centered experiences that build programming skills and confidence

CAHSI REU, Remote

Jan 2025 – June 2025

Machine Learning Researcher

- Engineered a Vietnamese-English neural machine translation system using OpenNMT-py and multilingual LLMs (MBart50), trained on 100k+ medical sentence pairs and improving BLEU scores by ~25% over baseline
- Applied advanced preprocessing (SentencePiece, MosesTokenizer, BPE) and evaluated translation quality with SacreBLEU and additional metrics to optimize performance on low-resource clinical data

PROJECTS

NAVI – Intelligent Personal Assistant | Next.js, Tailwind CSS, MongoDB

Oct 2025 – Oct 2025

- Collaborated in a team of 4 to design and build NAVI, an AI-powered digital assistant that unified data across Gmail, Outlook, and Calendar earning 3rd place out of 100+ participants at the CodeRED Hackathon 2025
- Integrated Google Gemini for natural-language understanding, ElevenLabs for realistic voice interaction, and Google/Microsoft Maps APIs for spatial context; developed a scalable Aggregator MCP framework that reduced data-sync latency by 60% and enabled modular plug-and-play integrations

Volunteering Web Application | React.js, Vite, Node.js, Express.js, PostgreSQL, AWS

Aug 2025 – Present

- Designed and built a full-stack platform where volunteers registered, complete profiles, and are automatically matched to events based on skills, availability, and location
- Implemented secure authentication, encrypted credentials, data persistence, and reporting tools (PDF/CSV) on PostgreSQL hosted in AWS, while integrating notifications and volunteer history tracking

Zoo Database Web Application | React.js, Vite, Node.js, MySQL, AWS

Aug 2024 – Dec 2024

- Led a team of 5 to develop a Full-Stack Zoo Management System, streamlining CRUD operations across multiple modules (animals, employees, exhibits, ticketing, and retail) and deploying an AWS-hosted MySQL database
- Designed a normalized schema with auditing triggers, transaction procedures, and soft deletion for data integrity, and built a responsive React.js dashboard featuring authentication and real-time data management

LEADERSHIP

UH NSM Career Center, Houston, TX

Aug 2025 – Present

Student Director

- Coordinated and hosted career fairs, internship bootcamps, and employer pop-ups, engaging 1000+ students with 70+ employers and recruiters while strengthening partnerships with industry and university leadership
- Reviewed, approved, and managed incoming internship, full-time, and research opportunities to ensure alignment with student needs and employer expectations