



Hieu Minh Nguyen

EDUCATION

Tampa, FL	University of South Florida	2021 - Expected May 2026
<ul style="list-style-type: none">Bachelor's / Master's Pathways Degree in Computer Science. GPA: 3.8/4.		

SKILLS

- Programming Language:** Python, C, C++, C#, Java, JavaScript, HTML5, CSS, SQL, Bash.
- Technologies and Tools:** MySQL, PostgreSQL, NoSQL, Git/GitHub, GitHub Action, AWS, Google Cloud, Azure, Docker.
- Web development Technologies:** Node.js, Vite.js, Express.js, React.js, FastAPI, Bootstrap, React Native, Flask, Next.js.

PROFESSIONAL EXPERIENCE

Research Assistant	University of South Florida	May 2024 - Present
Publication: "Global is Good, Local is Bad?": Understanding brand Bias in LLMs.		
<ul style="list-style-type: none">Conducted comprehensive research on bias across many categories, such as age or gender, within Large Language Model (LLM).Built a specialized library in Python for systematic evaluation of 100,000 datasets in LLMs, significantly reducing manual effort.Collaborated with a team of researchers on studies focusing on mitigating bias in human health records using machine learning.Researched techniques to optimize LLM code generation for complex data structures, algorithms, competitive programming.		

AI/ML Software Engineer (Intern)	Resilience, Inc.	Sep - Dec 2023
Technologies: AWS, React Native, Flask, Synk, Figma, Linux, Python.		
<ul style="list-style-type: none">Engineered a mindfulness app, resulting in enhanced emotional self-awareness across diverse user demographics.Executed design prototypes using Figma, further developing 5+ frontend features via React Native.Implemented a machine learning API endpoint with Flask (Python) on AWS EC2, leading to an 80% reduction in response latency.Coordinated with cross-functional teams, include engineering and business for smooth production releases.		

AI/ML Developer (Intern)	Resilience, Inc.	June - Aug 2023
Technologies: Keras, Numpy, Pandas, sklearn, matplotlib, TensorFlow, Python.		
<ul style="list-style-type: none">Preprocessed and visualized 7000+ audio samples to extract vital features and improve the quality of training data.Built a CNN model using Keras (TensorFlow) from scratch, achieving a 72% emotion classification accuracy.Streamlined machine learning processes by creating a pipeline for automated data handling and model training.Finetuned Whisper by multiprocessing through parallelization for CPUs to speed up translation time by 5.9x.		

PROJECTS

Talk To Listen (talktolisten.com)	FastAPI, Python, React Native, JavaScript, REST APIs, SQL, Firebase, Redux, CI/CD, AWS, Azure.
<ul style="list-style-type: none">Built a mobile AI chat app for seamless interaction with unique AI characters, each featuring distinct voices, personalities, stories.Grew the app to 1000+ active users and secured \$3000 in sponsorship from Microsoft, OpenAI, and AWS Startup Programs.Managed all stages from front-end, database, API design, and back-end, for a codebase exceeding 3000 lines.Created scalable distributed system architecture using Azure Application Gateway, Azure Load Balancer, Azure Virtual Machines.Constructed a RESTful APIs server with FastAPI (Python) capable of handling 30+ APIs, and 3 machine learning endpoints, deployed on AWS EC2 using Docker, and integrated with GitHub Actions for automated CI/CD.Created and published an open-source dataset of 3M tokens (nearly 2000 downloads monthly) and fine-tuned an LLM model using supervised learning, quantization method (QLoRA), and Pytorch, achieving an accuracy of 85%.	

JobsDreamer (jobsdreamer.com)	Scrapy, Selenium, Python, Google Gemini 1M API, GPT4o, Llama3, Proxy, Azure, AWS.
<ul style="list-style-type: none">Launched a platform that assists hundreds of students in finding internships, automatically sending them emails with newly all posted relevant internship opportunities on the internet within the last 24 hours.Established a comprehensive job data processing pipeline utilizing latest AI tools, AWS EventBridge, AWS Step Functions, AWS Fargate, and AWS Lambda to automate daily web scraping, data preprocessing, and email notifications.Deployed containerized microservices for web scraping across multiple job sites, leveraging Python, Scrapy, and Selenium.Automated a scalable and efficient Python pipeline with advanced LLMs to handle 1000+ of new raw data every day.	

BullBot (bullbot.tech)	Flask, AWS, Vite.js, Express.js, Node.js, Pytorch, Langchain, Python.
<ul style="list-style-type: none">Pioneered a full stack chatbot web app answering queries across 1500+ Uni of South Florida websites with natural language recognition, providing precise sources for user clarity, especially for parents less adept at online searches.Initiated a Retrieval Augmented Generation (RAG) system, integrating Vector Store for efficient data management.Orchestrated a microservice architecture leveraging Vite.js, Express.js/Node.js, and various AWS services.	

LEADERSHIP

Software Lead	Association for Computing Machinery - USF Chapter	November 2023 - Present
<ul style="list-style-type: none">Leading a team project of 8 by creating detailed project plans, functional requirements, and documentation.Hosting technical workshops and mentoring other members in preparing and delivering their workshops, fostering a collaborative learning environment.		