

BHONE KYAW SI HEIN

Houston, TX | (628) 230-9788 | bhonekyawsihein@gmail.com | [LinkedIn](#) | [GitHub](#)

SUMMARY

AI and automation engineer with production full-stack experience, focused on turning manual business processes into working automated systems. Builds LLM agents and orchestration layers (LangChain, LangGraph), integrates third-party services via REST and OAuth 2.0, and ships client-facing products end to end. Comfortable scoping a messy business problem, finding the automatable pattern, and delivering the build independently.

TECHNICAL SKILLS

AI & Automation: LangChain, LangGraph, agent orchestration & tool routing, RAG pipelines, prompt engineering, multimodal LLM calls, Anthropic / OpenAI / DeepInfra APIs, FAISS, ChromaDB, Ollama, Hugging Face

Integrations & APIs: REST, GraphQL, OAuth 2.0, webhooks, API gateways, Stripe, Supabase, Twilio-style messaging workflows

Languages: Python, JavaScript, TypeScript, SQL, C++, PHP

Web & Mobile: React, React Native, Next.js, Node.js, Expo, Laravel, Tailwind CSS

Data & DevOps: PostgreSQL, MySQL, MongoDB, Firebase, Git/GitHub, Docker, CI/CD (GitHub Actions), AWS, PySpark, scikit-learn, PyTorch

EDUCATION

University of Houston – Cullen College of Engineering

Aug 2025 – Dec 2026 (expected)

M.S. in Engineering Data Science and AI

- Coursework: Generative AI and Applications, Natural Language Processing, Computer Vision, Applied Neural Networks, Introduction to Machine Learning, Introduction to Data Science, Introduction to Cloud Computing, Probability and Statistics, LiDAR Systems and Applications, Data Analytics for Engineering Managers

University of Greenwich, London

2019 – 2022

BSc (Hons) Computing

EXPERIENCE

Instructional Assistant | Conrad N. Hilton College, University of Houston (Part-time)

Aug 2025 – Present

- Provide **Canvas LMS** and technical support to faculty, staff, and students, resolving hardware, software, and network issues and maintaining classroom and computer-lab technology.
- Support **Hotel IT operations** for hospitality education, working with faculty and IT staff to improve technology integration and keep academic resources reliable.

Freelance Developer | Ebosi Technologies

Jul 2025 – May 2026

- Architected and shipped the **Ebosi NEMT platform** end to end: two published iOS apps (Ebosi, Ebosi Drivers), Next.js admin dashboards, Node.js APIs, Stripe payments, and a PostgreSQL/Supabase backend — scoped directly with the client, deployed to production, and maintained under a support retainer.
- Built the rider app (**Ebosi**) for booking and tracking non-emergency medical trips and the driver app (**Ebosi Drivers**) for dispatch, trip status, and navigation, both in React Native/Expo and published to the App Store.

Junior Developer | uab bank – FinTech, Digital & Card Dept., Yangon, Myanmar

Aug 2022 – Jun 2023

- Developed and maintained digital payment applications (uabpay, pay+, SGH Plus) in React Native; integrated backend APIs, wrote automated tests, and ensured cross-platform stability in production.
- Built and deployed SGH Plus, a white-label mobile application, and debugged live production issues alongside cross-functional product and security teams.

Web Developer Intern | uab bank – Technology Dept., Yangon, Myanmar

Jun – Aug 2022

- Built a mini core-banking system with transaction workflows, withdrawal/deposit modules, and automated reporting tools using PHP and JavaScript.

PROJECTS

Spatial Omics Copilot — AI Agent Layer | Research Team Project (6 engineers)

2026

- Owned the **LangGraph orchestration layer** of a RAG chatbot that let researchers query spatial transcriptomics data in plain English: tool definitions, routing logic selecting between vector retrieval, live dataset queries, and image-based answers, and multimodal prompt construction served via DeepInfra.
- Designed tool boundaries and fallback paths so the agent failed explicitly rather than hallucinating when a tool returned nothing usable.

MDAMCR — Automated Multimodal Data Pipeline | Computational Biomedicine Lab, UH

2025 – Present

- Built a fully local AI pipeline (Whisper, LLaMA 3.2, LLaVA) automating transcription, entity extraction, and classification across 50+ case records; evaluated output quality with B-cubed F1 and pairwise precision/recall metrics.

Multimodal AI Chatbot Agent | Course Project

Spring 2026

- Built a retrieval-augmented agent with LangChain, Ollama (LLaMA 3.2), and FAISS supporting document Q&A and tool-augmented reasoning; benchmarked baseline vs. engineered chunking strategies for retrieval quality.