Mariano Luiz B. King

Caloocan City, PH | marianoluiz.king@gmail.com | +63 994 537 9693

LinkedIn | Portfolio: **marianoluiz.dev** | GitHub

SUMMARY

Full-stack developer building modern web and AI applications, with hands-on experience in machine learning and RAG systems. Earned the **IBM Full Stack Software Developer Professional Certificate**.

EXPERIENCE

BlastAsia, Inc. - View Certificate   **Pasig City, PH**
Frontend Developer Intern   *June 2024 - July 2024*
• Built and shipped front-end features across **3 enterprise-grade** projects, translating design specs into high-performance interfaces using **HTML**, **CSS**, **JavaScript** and modern web practices.
• Collaborated with developers to implement modular UI components, enabling smooth integration and on-time feature delivery.
• Diagnosed and resolved layout, responsiveness, and performance issues during development cycles.

Google Developer Groups on Campus PLM   **Manila, PH**
Web Development Lead   *Aug 2025 - Present*
• Developed and deployed multiple web projects end-to-end, writing code, implementing features, and ensuring high-quality standards.
• Mentored developers, enforced best practices, and improved workflows for maintainable and scalable projects.

Zuitt Coding Bootcamp - View Certificate   **Quezon City, PH**
Frontend Developer Trainee   *Oct 2022 - April 2023*
• Completed a 6-month, 100+ hour front-end development training during senior high school **work immersion**, mastering HTML, CSS, Bootstrap, JavaScript, and Git.
• Built **10+ web interfaces** following clean, maintainable, and scalable code standards.

EDUCATION

University of the City of Manila *(Pamantasan ng Lungsod ng Maynila)*   **Manila, PH**
Bachelor of Science in Computer Science | Dean's Lister (5x)   *Ongoing*

FEATURED PROJECT

Iskolar.app | *College Entrance Exam Platform*
Live: https://iskolar.app
• Built and deployed a **production-ready** full-stack study platform serving **daily active users**.
• Implemented secure **authentication** using NextAuth with Google **OAuth**, **JWT**-based sessions, and Gmail **SMTP** for verification flows.
• Designed **spaced repetition** scheduling (SM-2 inspired) and scalable Firestore data architecture for flashcard tracking.
• Stack: Next.js, TypeScript, Firebase Firestore (NoSQL), NextAuth, Material UI.

RAG Chatbot and Campus Guide | *University AI Web App*
GitHub: http://github.com/marianoluiz/plm-assistant
• Developed a campus web app providing navigation and real-time answers via an AI chatbot.
• Implemented a **Retrieval-Augmented Generation (RAG)** pipeline combining vector store **embedding**, indexing, query analysis, and hypothetical question generation to improve accuracy and reduce hallucinations.
• Built using **LangGraph**, Gemini AI, ChromaDB, Flask, Python, and React.js.

CHUNGUS Language | *Programming Language*
GitHub: https://github.com/marianoluiz/chungus-lang
• Built a Python-based **compiler from scratch** with a finite-state-machine lexer and syntax analyzer.
• Developed **2000+ automated test cases** with pytest and **continuous integration** via GitHub Actions.
• Implementing semantic analysis and code generation as the next stages of the compiler.

SignifAI | *AI Rhythm Sign Language Game*

Live: https://signifai.vercel.app | GitHub: *https://github.com/marianoluiz/SignifAI*

• Built a real-time web-based rhythm game for learning ASL using hand gesture recognition reaching **80+ users**.

• Implemented live detection of 26 ASL hand signs using a **custom-trained hand gesture classification model** integrated with **MediaPipe**.

• Stack: React, TypeScript, TensorFlow.js, MediaPipe, Firebase Firestore.

Fiddle | *Mobile AI Rhythm Sign Language Game*
GitHub: https://github.com/marianoluiz/fiddle

• Developed a **mobile adaptation** of SignifAI, implementing real-time ASL hand gesture recognition using MediaPipe and TensorFlow.

• Won **2nd Runner-Up, Android Game Category, 14th IT Skills Olympics** (University of Makati).

TALLY | *Mobile Educational App*
DevPost: https://devpost.com/software/tally-teach-and-learn-life-yields

• Won **"Best Working App" at GDSC PLM's 2025 InnOlympics Hackathon ($200 prize)**; built with *FlutterFlow* and *Supabase*.

SKILLS

Languages: TypeScript, JavaScript, Python, Java
Frontend: React.js, Next.js, Bootstrap, TailwindCSS, Material-UI, HTML, CSS, SCSS
Backend: Node.js, Express.js, Flask, Django
AI / Data: LangGraph, Pandas, NumPy, TensorFlow, MediaPipe
Databases: MySQL, PostgreSQL, Firebase, Supabase
Tools: Git, Docker, Linux, Postman, Figma, AWS, n8n
Certificates: IBM_FullStack_Software_Developer_Certificate, AWS_Cloud_Essentials_Certificate, DataCamp_Intermediate_Python, [and more...]