Mariano Luiz B. King

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LinkedIn | **Portfolio** | GitHub

SUMMARY

Software Developer skilled in full-stack development, AI integration, and user-focused design. Certified with the **IBM Full Stack Software Developer Certificate**. Strong background in building reliable, user-focused applications.

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**, 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 Student Clubs PLM   **Manila, PH**
Web Development Lead   *Aug 2025 - Present*
- Oversaw multiple web projects end-to-end, from planning to deployment
- Guided developers and enforced basic code quality and deployment practices

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 (4x)   *Ongoing*

FEATURED PROJECT

PLM Chatbot and Campus Guide
University AI Web App
- Developed a campus web app that helps students navigate university facilities through an interactive map and access real-time answers about rules, policies, and student services 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
- Built a **Python-based compiler**; implemented a complete lexer using a finite-state machine.
- Developed a **268+ case,** CSV-driven **pytest** suite and CI with **GitHub Actions**; built a **IDE-style GUI** for interacting with the compiler
- Currently implementing syntax analysis, semantic analysis, and code generation.

SignifAI
AI Rhythm Sign Language Game
- Developed an interactive rhythm game teaching American Sign Language (ASL) through real-time gesture recognition and music-based gameplay, garnering **80+ unique players** featured on the leaderboard.
- Implemented real-time detection of 26 ASL hand signs using a combination of a **custom-trained model** and MediaPipe's pre-trained hand tracking system.
- Built using *React, TypeScript, Tailwind CSS, TensorFlow, MediaPipe CV, Redux, React Router, Firebase, Vite*.

Fiddle
Mobile AI Rhythm Sign Language Game

• Developed a cross-platform mobile rhythm game that teaches sign language through interactive, music-based gameplay.

• Achieved **2nd Runner-Up** at the **14th IT Skills Olympics** Android Game category held at the **University of Makati**.

• Built using *React Native, TypeScript, Python, TensorFlow, MediaPipe CV.*

TALLY

Mobile Educational App

• Designed and shipped a gamified classroom economy app to teach budgeting, saving, and taxes via task-reward mechanics.

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

PLM Data Form

Data Management Web System

• Developed a full-stack CRUD app with **RESTful APIs** and dynamic data visualizations for student records.

• Implemented backend logic and chart rendering using *Node.js, Express.js, MySQL,* and *Chart.js*.

• Designed and implemented both user-facing forms and an admin dashboard using *React*, *Bootstrap*, *SCSS*, and *Figma*.

TransacGalore

Point-of-Sale and Inventory System

• Developed a desktop application in ***Java*** with ***MySQL*** integration for real-time sales tracking and inventory control.

BrainyPals

Mobile Educational Game

• Developed a ***React Native*** quiz app using *Expo* and ***TypeScript*** that teaches kids Numbers, Letters, and Vocabulary through randomized questions, audio-visual feedback, animations, and Challenge Mode for an engaging learning experience.

• Designed specifically for mobile with a focus on user experience, accessibility, and interactive learning.

SKILLS

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