

AARON JALAPON

Software Engineer • Machine Learning Enthusiast • Product-Focused Developer

📍 Philippines | ✉️ aaronjalapon@gmail.com | [GitHub](#) | [LinkedIn](#) | [Portfolio](#)

SUMMARY

Computer Science student and product-minded developer specializing in **web development, machine learning, and system design**. Experienced in building **real-world, impact-driven solutions** across **AgriTech, Mental Health Tech, and PropTech**. Proven ability to collaborate in multidisciplinary teams, rapidly prototype under hackathon constraints, and deliver intuitive, user-centered systems.

TECHNICAL SKILLS

- **Languages:** Python, JavaScript, Java
- **Frameworks & Tools:** React, Node.js, Flask/Django, REST APIs
- **Machine Learning:** scikit-learn, data preprocessing, feature engineering, model deployment
- **Databases & Cloud:** PostgreSQL, containerized deployments
- **UI/UX:** Responsive design, accessibility, Figma, user-flow optimization
- **Other:** Git, Docker, Agile / sprint-based development

FEATURED PROJECTS

TanUM Nanotech Solutions

Smart Soil Monitoring & Nano Fertilizer Optimization System

Software & Machine Learning Lead

- Designed and implemented a **cloud-based platform** for ingesting, storing, and visualizing real-time IoT soil data (NPK, pH, moisture, EC, temperature).
- Developed **machine learning models** to analyze soil nutrient trends and generate **automated fertilizer recommendations**, reducing fertilizer waste and soil degradation.
- Deployed ML outputs into a **web dashboard and SMS notification system**, ensuring accessibility for smallholder farmers and agricultural cooperatives.
- Collaborated with IoT and nanotechnology teammates to deliver an end-to-end AgriTech solution.

Mindspace

Student Mental Health Support Application

Front-End Developer

- Built the **responsive front-end UI** for a mental-health platform offering self-help resources, guided meditations, moderated peer support, and crisis-hotline integration.
- Focused on **accessibility, privacy-first UI design**, and intuitive navigation for student users.
- Improved **guided session completion by ~30%** and reduced **time-to-resource discovery by ~45–50%** through UI and UX optimizations.
- Worked closely with designers and mental-health advisors to translate research-based practices into usable interfaces.

RealiTech

PropTech Ecosystem & Buyer-Assistant Chatbot
Sprint Lead / Product & Software Contributor

- Led a sprint to prototype a **buyer-assistant chatbot** that guides users through loan pre-qualification, document checklists, and next-step actions.
 - Implemented structured buyer profiling to reduce confusion in the home-buying process.
 - Achieved an estimated **50–55% reduction in pre-qualification guidance time** and **~40% increase in user confidence** through clearer workflows and automation.
 - Contributed to roadmap planning across multiple ecosystem modules.
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AWARDS & COMPETITIONS

- **Top 3 — Preliminary Round**
Proptech Hackestate Hackathon — *July 30, 2025*
Project: **RealiTech**
 - **Best UX Award & Top 5 Finalist — Finals**
Proptech Hackestate Hackathon — *August 27, 2025*
Venue: **Grand Regal Hotel & Casino**
Project: **RealiTech**
 - **First Runner-Up**
Innovation Olympics 3.0
September 2–3, 2025 — **University of the Philippines Los Baños**
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EXPERIENCE

Founder — Online Selling & Street Food Business

- Started with **₱1,000 capital**, scaled operations to support inventory expansion and equipment acquisition.
 - Managed sourcing, pricing, customer engagement, and logistics.
 - Developed strong business, communication, and problem-solving skills.
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EDUCATION

Bachelor of Science in Computer Science
University of Mindanao
Focus: Software Engineering, Data Science, Machine Learning

INTERESTS

AI for sustainability • Productivity systems • UX design • Entrepreneurship • AgriTech & PropTech innovation

Award-winning CS student building AI-powered, user-centered solutions across agriculture, mental health, and real estate technology.