

Clyde Lawrence M. Borrega

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About Me

Senior Computer Engineering student at the University of the Philippines Diliman with 7+ years of programming experience. Skilled in Python, C++, and Rust with hands-on experience in machine learning, cloud computing, embedded systems, and AI workflow automation. Experienced in building scalable automation systems, NLP pipelines, and embedded data acquisition platforms. Seeking a Software Engineering, Cloud Engineering, or Machine Learning Engineering role to build reliable and impactful systems.

Education

Bachelor of Science in Computer Engineering

University of the Philippines Diliman (UPD) — Quezon City, Metro Manila
Running for Magna Cum Laude
Department of Science and Technology (DOST) Scholar
2022 - Present

Science, Technology, Engineering, and Mathematics

Philippine Science High School - Bicol Region Campus (PSHS-BRC) — Goa, Camarines Sur
With High Honors
DOST Youth Excellence in Science Awardee
2016 – 2022

Skills

- **Technical Skills:** Machine Learning, Cloud Computing, AI Automation, Data Science, Programming, Web Development, Database Management.
- **Soft Skills:** Leadership, Problem Solving, Critical Thinking, Time Management, Professionalism, Attention to Detail, Perseverance.

Tools & Technologies

- **Programming & Web Development Languages:** Python, Java, JavaScript, C++, Rust, HTML, CSS
- **Machine Learning & Data Science:** PyTorch, Scikit-learn, Hugging Face Transformers, PaddleOCR, Pandas, NumPy, Gradio
- **AI & Workflow Automation Tools:** Zapier, n8n, Make
- **Cloud & DevOps:** AWS, Docker, Kubernetes, Git, REST APIs, Supabase, Render
- **Development Environments & Platforms:** Elastic Search, Kibana, Jupyter, GitHub, Visual Studio Code, Vivado, Vitis, MPLab
- **CRM & Project Management Tools:** GoHighLevel, Notion, HubSpot, Airtable, Monday.com
- **Chatbot Development:** Microsoft CoPilot Studio
- **Applications:** Microsoft Office Suite, Google Apps (Docs, Sheets, Apps Script), TinkerCAD, AutoCAD, Canva, KiCad
- **Operating Systems:** Linux, macOS, Windows

Experience

Freelance Experience

AI & Workflow Automation Specialist

Remote

Freelance

Jun 2024 – Present

- Designed automation systems and AI workflows for businesses across e-commerce, SaaS, and marketing.
- Built automation pipelines using n8n, Zapier, and Make, integrating tools such as Airtable, HubSpot, Notion, Google Workspace, and GoHighLevel.
- Reduced manual operations and processing time by automating lead management, CRM updates, and communication workflows.
- Developed scalable integrations using webhooks, REST APIs, and cloud services.
- **Key Projects include:**
 - **AI Outbound Calling Automation:** Built a webhook-driven outbound calling engine using n8n, Vapi, and GPT to automate lead dialing, transcript retrieval, structured AI classification, and result logging to Google Sheets. Implemented crash recovery, execution tracking, and idempotent safeguards to ensure stable, sequential processing across multiple leads.
 - **AI Content Generation:** Engineered a workflow to transcribe MP3/4 files and automatically generate email/blog drafts, drastically reducing content creation time.
 - **Airtable-Powered Chatbot:** Developed a no-code chatbot connected to an Airtable database to provide instant, automated responses to user queries.
 - **Sales CRM Automation:** Built and managed complex workflows in Hubspot to streamline lead nurturing, client communication, and internal team handoffs.

College Mathematics Tutor

Quezon City, Metro Manila

Freelance

Oct 2023 – Jun 2024

- Tutored Math 21 (core mathematics subject) concepts to undergraduate students.
- Designed problem sets and guided clients through exercises and past exam questions.
- Improved client performance through structured exam preparation.

Internship Experience

Quality Assurance (QA) Intern

Remote

Department of Science and Technology (DOST)

Jun 2025 – Aug 2025

- Designed and executed website test cases to validate functionality prior to website launch.
- Reported and documented bugs, collaborating with developers for timely fixes.
- Improved website reliability and user experience by ensuring compliance with QA standards.

University & Leadership Experience

Digital Signal Processing (DSP) Lab Affiliate

Quezon City, Metro Manila

UPD EEEL

Aug 2025 – Present

- Conducting capstone project on improving Filipino and Taglish language detection using transformer-based NLP models, including training custom tokenizers and fine-tuning models on mixed-language corpora.
- Designed and implemented a scalable text analytics pipeline for Filipino/Taglish datasets using Elasticsearch and Kibana to automate data crawling, preprocessing, and real-time linguistic visualization.
- Built preprocessing workflows for dataset cleaning, normalization, stopword filtering, and spelling variation analysis to improve corpus quality and support downstream model training and evaluation.

Student Assistant

Quezon City, Metro Manila

UPD Electrical and Electronics Engineering Institute (EEEL)

Aug 2024 – Present

- Supported programming courses by developing demos and visualizations of practical problems.
- Assisted professors with grading quizzes, checking class attendance, and managing course materials.

- Provided one-on-one guidance to students in debugging and solving programming challenges.

Can Satellite Project Team Head

UPD EEEl

Quezon City, Metro Manila

Jan 2025 – Jun 2025

- Led and collaborated in a 3-member team to design, build, and test a Can Satellite (CanSat) to measure real-time, in-flight air quality conditions.
- Programmed a PIC32 microprocessor to interface with multiple sensors, process acquired data, and manage data transmission.
- Integrated the complete sensor array and validated data integrity from the PIC32, ensuring full system functionality during testing.

Deputy Executive Secretary

UP Volleyball Club (UPVC)

Quezon City, Metro Manila

Sep 2023 – Aug 2024

- Assisted the Executive Secretary by compiling meeting minutes and managing organizational records.
- Coordinated schedules and logistics for approved club activities and events.
- Supported committee heads in planning and executing activities.

Competitions

Silver Medalist

GCash AI Week Hackathon and Good Data for Good Workshop

Taguig City, Metro Manila

Mar 2025

- Collaborated with a 4-member team to develop an AI-driven FinTech prototype using AWS PartyRock.
- Designed a budget tracking feature integrated with GCash's "Send Money" functionality.
- Implemented a multilingual chatbot (Filipino + English) for customer service automation.
- Automated transaction categorization and budget deduction using AI-based suggestions.

Bronze Medalist

Singapore National Olympiad in Informatics (SG NOI)

Singapore

Mar 2019

- Competed internationally in algorithmic programming and problem-solving challenges.
- Solved advanced problems using C++ and Python, demonstrating creativity and efficiency in coding.