Joseph P. Pulayan

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Professional Summary

AI Software Developer specializing in Large Language Models (LLMs), Retrieval-Augmented Generation (RAG), and agentic workflows. Experienced in designing and deploying AI-powered agents and chatbots that integrate with business systems to automate processes and enhance user interactions. Skilled in OpenAI, Anthropic, Gemini, and LangChain, with a focus on prompt engineering, intelligent orchestration, and RAG-enhanced solutions. Passionate about advancing Generative AI applications that deliver measurable business value.

EDUCATION

University of Santo Tomas

Sampaloc, Manila

Bachelor of Science in Computer Science

June 2024

• Core Computer Science (Machine Learning, Natural Language Processing, Empathic Computing)

EXPERIENCE

Journey Better Business Group Inc.

Dela Rosa, Makati

AI Software Developer

October 2024 - Present

- Designed and deployed AI-powered chatbot agents with LLMs + RAG, enabling users to instantly access accurate, context-aware business information.
- Developed custom agentic workflows with LiteLLM, supporting multi-step reasoning, external tool use, and data retrieval.
- Integrated agents into CRM and business systems, reducing manual effort by automating information delivery and data handling (cutting hours of repetitive tasks weekly).
- Built RAG pipelines using Pinecone, pgvector, and PostgreSQL, improving retrieval accuracy and knowledge coverage.
- Refined prompt engineering strategies, enhancing reliability and user satisfaction in complex query handling.
- Collaborated with fellow AI Developers and Prompt Specialists to design agent flows aligned with business goals.
- Integrated LlamaParse into RAG pipelines to extract structured context from PDFs, enriching vector databases and improving agent response accuracy
- Implemented web crawling pipelines to expand the knowledge base and keep agents updated with external business intelligence.
- Delivered production-ready AI solutions successfully deployed to clients, driving measurable improvements in workflow automation.

Calibr8 Systems Inc.

Ortigas, Pasig

Developer Intern

February 2024 - May 2024

- Developed token generation and data processing functions for a System Monitoring Tool, enhancing API security and efficiency.
- Used Postman for API testing and data integration, supporting robust monitoring features.

• Analyzed and processed data to drive actionable insights for system monitoring.

PROJECTS

A Comparative Study Between MediaPipe with Bidirectional Long Short-Term Memory (BiLSTM) and OpenPose with Long Short-Term Memory (LSTM) for Filipino Sign Language Recognition

- Developed a Python application recognizing 50 Filipino Sign Language gestures, translating them into text for the deaf community.
- Improved system accuracy and reduced model training/prediction times.
- Programmed Mediapipe with Bi-LSTM module; curated datasets and analyzed model performance.
- Awarded Third Place for Best Thesis for innovation and impact.

InvoxAI – Enterprise Invoice Processing & Validation System

- Built an enterprise-grade AI system to automate invoice processing, vendor validation, fraud detection, and approval workflows.
- Leveraged OpenAI Vision API + GPT-4 via LiteLLM for document parsing, anomaly detection, and validation.
- Designed full-stack architecture: React/Next.js (frontend), FastAPI (backend), Supabase (PostgreSQL + Vector search, storage).
- Implemented features such as AI-powered PDF parsing, purchase order validation, fraud detection, approval workflows, analytics dashboards, and audit compliance.

SKILLS & INTEREST

Technical Skills

- LLMs & Generative AI: OpenAI, Anthropic, Gemini, LiteLLM, RAG, Prompt Engineering, AI Agents / Agentic Workflows
- AI/ML Frameworks: TensorFlow, PyTorch, Scikit-learn, Keras, NumPy
- Data & Vector Stores: Pinecone, pgvector, PostgreSQL, SQL
- Web Crawling & Automation: Selenium, BeautifulSoup, Crawl4AI
- Programming & Development: Python, JavaScript, Java, React, HTML, CSS
- Cloud & Workflow Tools: DigitalOcean, AWS, Apache Airflow, Zapier
- Visualization & BI: Tableau, Power BI
- Tools & Version Control: VS Code, PyCharm, Jupyter Notebook, Git