**Muhammad Ramdhan Hidayat**

Jakarta, Indonesia | +6281295813273 | ramdhan\_hidayat@outlook.com | LinkedIn | Portfolio | Blog

**SUMMARY**

AI specialist with 1.5+ years of project-based experience designing, building, and evaluating LLM-powered applications. Proficient in Python, LangChain, and the OpenAI API, with a focus on developing RAG systems, chatbots, and AI agents. Proven ability to manage the end-to-end project lifecycle from data preprocessing and prompt engineering to backend API development.

**TECHNICAL SKILLS**

* Programming Languages: Python, SQL, R, Clojure, TypeScript
* LLM & NLP: LangChain, OpenAI API, Hugging Face Transformers, RAG, Prompt Engineering, LLM Evaluation, Fine-Tuning Concepts, Vector Databases, NLP, Data Preprocessing
* Data & Cloud: BigQuery, AWS SageMaker, Pandas, NumPy, Scikit-learn, UMAP, HDBSCAN
* Web Development: Next.js, React, Tailwind CSS, Python (Backend)

**AI & LLM PROJECTS**

**SycoBench - LLM Sycophancy Evaluation & Benchmarking Platform**

* Developed a comprehensive LLM evaluation platform to benchmark and visualize model sycophancy (over-alignment), a key challenge in building reliable AI agents.
* Engineered a Python backend to automate model evaluation, implementing custom logic for metric computation based on transformer architecture outputs.
* Designed and implemented a series of structured prompts (prompt engineering) to test model responses across diverse topics, identifying critical performance gaps.
* Built an interactive Next.js and TypeScript dashboard to present multi-metric comparisons, enabling deep analysis of model bias and performance.

**PdVerse - RAG-Powered PDF Chatbot & Document Management System**

* Architected and built an end-to-end AI agent for intelligent document interaction, functioning as a chatbot for semantic Q&A over PDF files.
* Developed a Python backend using LangChain to implement a hybrid Retrieval-Augmented Generation (RAG) pipeline for high-accuracy information retrieval.
* Integrated the OpenAI API for language understanding and generation, designing a modular system for chat memory and document persistence.
* Developed and deployed a RESTful API using Python to serve the RAG pipeline, ensuring low-latency responses for the Next.js frontend.

**PROFESSIONAL EXPERIENCE**

|  |  |
| --- | --- |
| **AI & Data Science Mentor** | **Dec 2023 – Apr 2024** |
| ***Rakamin Academy*** |  |

* Led practical workshops for 25 aspiring data scientists on building end-to-end LLM applications, covering RAG systems, prompt engineering, and API integration.
* Guided students in developing NLP projects, including data preprocessing of text datasets, model training, and evaluation using Python.
* Assessed and provided technical feedback on Python-based data science projects, covering everything from SQL querying to model implementation.

|  |  |
| --- | --- |
| **Education Mentor, Machine Learning & Data Analytics** | **Feb 2022 – Jun 2023** |
| ***Kampus Merdeka*** |  |

* Provided advanced data science instruction to 70 students over three batches, covering topics from data collection and processing to modeling and deployment.
* Evaluated and offered detailed feedback on student projects, reinforcing best practices in the data science project lifecycle.

|  |  |
| --- | --- |
| **Data Analyst** | **Nov 2021 – Jun 2022** |
| ***Zenius Education*** |  |

* Extracted and processed large-scale user data from Google BigQuery to support business intelligence and machine learning initiatives.
* Curated and cleansed datasets for modeling tasks on AWS SageMaker, establishing foundational skills for preparing data for AI pipelines.
* Conducted A/B testing and statistical analysis on user interaction data to generate actionable insights, informing key product decisions.

|  |  |
| --- | --- |
| **Problem Generator/Junior Programmer** | **May 2021 – Nov 2021** |
| ***Zenius Education*** |  |

* Applied Python for large-scale data analysis and validation, rectifying errors in thousands of production JSON files.
* Implemented process improvements that resulted in a 90% reduction in production errors.
* Promoted to Team Lead within two months for exceptional performance and provided technical guidance to junior team members.

**EDUCATION**

|  |  |
| --- | --- |
| **Master of Science in Data Science & Analytics** | **2020 – 2024** |
| ***University of Science Malaysia*** |  |

|  |  |
| --- | --- |
| **Bachelor of Science in Physics** | **2015 – 2019** |
| ***University of Malaya*** |  |

**CERTIFICATIONS**

|  |  |
| --- | --- |
| BCG X Data Science Virtual Experience | Completed Sep 2023 |
| ***Forage*** |  |