# Pinil Dissanayaka

# **Data Scientist**

## Summary \_

Motivated Data Scientist with a strong foundation in Artificial Intelligence, Machine Learning, and Data Engineering. Skilled in building AI systems, designing and training machine learning models, developing APIs, and constructing end-to-end data infrastructure. Experienced in deploying AI solutions on cloud platforms. Known for problem-solving, analytical thinking, and a collaborative approach to driving innovation and achieving goals. Passionate about leveraging AI to solve real-world challenges and create impactful solutions.

## Education

## **Bachelors of Science (Hons) Computing and Information Systems**

Feb 2021 - Feb 2024

- Sabaragamuwa University of Sri Lanka | Belihuloya
- GPA: 3.47/4.0

#### G.C.E Advanced Level

Feb 2009 – Sep 2020

• President's College | Sri Jayawardhanapura - Kotte

# **Work Experience** \_

## Machine Learning Engineer | AbsolX Core Al

- Worked Under CodeGen International, utilizing Stable Diffusion for image generation and optimizing AI agents.
- Collaborated with teams to integrate scalable AI models into production systems.
- Conducted ongoing research to integrate the latest AI advancements, optimizing model accuracy.

## Al Developer | NoLoopTech

- Specialized in large language model fine-tuning, building AI agents, and chathots
- Collaborated with cross-functional teams to integrate scalable AI models into production systems.
- Led ongoing research to implement the latest AI advancements, optimizing model accuracy and performance.

## Skills \_

Languages: Python, Java, JavaScript, PHP

Databases: MySQL, Microsoft SQL Server, PostgreSQL, MongoDB, Neo4j

**Libraries:** Numpy, Pandas, Statsmodels, Matplotlib, Seaborn, Plotly, NLTK, Scikit-learn, OpenCV, MLflow, Transformers, React

**Frameworks:** TensorFlow, PyTorch, LangChain, LangGraph, CrewAl, LlamaIndex, Flask, FastAPI, Django, Laravel **Tools & Technologies:** GitHub, Git, Docker, Power BI, AWS, Apache Airflow, Apache Spark, Apache Kafka

#### Achievements

- Finalist, IEEE AI-Driven Sri Lanka 2024 Selected for developing innovative AI-driven solutions in Sri Lanka president election.
- 2nd Runner-Up, Data Odyssey 2024 Awarded for designing the Agri-Connect system.
- 1st Runner-Up, TADHack 2023 For innovative contributions to the Al-powered Agri-Connect app.

# **Projects**

## Al Chatbot with Dynamic Tool Integration: Developed for NoloopTech

- Built an intelligent AI chatbot for NoloopTech featuring a modular, agent-driven architecture capable of retrieving, rewriting, and generating responses in real time.
- Integrated dynamic tools for sending automated emails and fetching data from databases, enabling seamless customer support and business automation.
- Designed a flexible plugin-style system for tool integration, allowing easy expansion to services like CRM, APIs, and internal platforms.
- Tools and Technologies: Python, LangChain, LangGraph, and FastAPI.

## Rise Construction AI Agent: Developed for Rise Tech Village

- Designed and developed "Rise Construction AI Agent", a chat-based, intelligent multi-role platform for the construction industry.
- Enabled users to handle construction-related inquiries, resource rentals (machines and labor), and project management seamlessly via chat.
- Built scalable, AI-driven solutions to simplify construction workflows and enhance operational efficiency through chat interactions.
- Tools and Technologies: Python, LangChain, LangGraph, Unstructured, Flutter and Transformers.

#### Paddy Doctor: Automated Paddy Disease Classification System

- Designed and developed a system that uses image processing and convolutional neural networks (CNN) to classify more than 10 diseases of the paddy crop with an accuracy of 98%.
- Tools and Technologies: Python, Flask, TensorFlow, Keras, and OpenCV

#### **Glova**: Revolutionizing Skincare with AI-Powered Personalization

- Implemented advanced facial recognition technology to analyze skin types and conditions with 98% classification accuracy. Enabled precise assessments as a foundation for personalized skincare routines.
- Developed AI models to create tailor-made skincare plans achieving 95% user satisfaction based on feedback.
- Tools and Technologies: Flutter, Python, Flask, TensorFlow, Keras, OpenCV, and LangChain.

## Agri Connect: Al-Powered Crop Recommendation and Disease Prediction System

- Designed and implemented a Crop Recommendation Tool using long- and short-term memory (LSTM) models, achieving 98% precision in predicting optimal crops based on location, soil, and climate conditions.
- Developed a solution recommendation system using RAG architecture, leveraging local data sources to generate context-specific real-time treatment solutions for predicted diseases.
- Tools and Technologies: ReactJS, Python, FastAPI, TensorFlow, Keras, OpenCV, LangChain, and scikit-learn.

## Jan 2025 – Mar 2025 Al Chat Agent

Dec 2024 – Feb 2025
Rise Construction

Jun 2024 – Aug 2024

Paddy-Doctor

Sep 2023 – Feb 2024

Aug 2023 – Sep 2023

Agri-Connect

## References \_

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