

# ISHARA DISSANAYAKE

DATA SCIENTIST

+9470 209 0885

@ [thisismaduishara@gmail.com](mailto:thisismaduishara@gmail.com)

[linkedin.com/in/isharadissanayake](https://www.linkedin.com/in/isharadissanayake)

[github.com/thisisishara](https://github.com/thisisishara)

## EXPERIENCE

### DATA SCIENTIST

JAN 2023 - PRESENT

#### SHOUTOUT AI

- Decreased conversational AI development time by 2.3x by introducing an open-source development tool.
- Built a fine-tunable and fully scalable automatic language detection model for multi-lingual conversational AIs (R&D).
- Boosted response design efficiency by 2x with integrated LLMs.
- Increased query resolution efficiency by 1.5x with an intent suggestion feature in conversational AI fallback scenarios.
- Improved the accuracy of a large conversational AI project from 43% to 95% using NLU pipeline and dataset quality optimization strategies.

### ASSOCIATE DATA SCIENTIST

APR 2022 - JULY 2022

#### SHOUTOUT AI

- Achieved 3x faster chatbot deployment time by migrating to Docker.
- Led 2 enterprise-level multilingual conversational AI projects, contributing over 30% to ShoutOUT AI's revenue.
- Reduced conversational design time by 75% by introducing a new conversation design tool to the team.

### DATA SCIENCE INTERN

SEP 2021 - MAR 2022

#### SHOUTOUT AI

- Fully eliminated downtime by leveraging external natural language generation servers for updating conversational AI responses.
- Reduced conversational AI downtime by 90% by separating the training and deployment processes.

## CERTIFICATIONS

### RASA CERTIFIED DEVELOPER

JAN 2023

RASA

### PCAP - PROGRAMMING ESSENTIALS IN PYTHON

MAY 2021

CISCO

## SKILLS

### PROGRAMMING LANGUAGES

Python, JavaScript, Java

### FRAMEWORKS & LIBRARIES

Rasa Open Source, TensorFlow, NumPy, HuggingFace Transformers, NLTK, SpaCy, LangChain, StreamLit, Pandas, Scikit Learn, Flask, React JS

### TOOLS

MongoDB Atlas, Weaviate, AWS, Docker, GIT, GitHub, GitHub Actions, Prometheus, Grafana NGINX, Postman, SQL, Jira

### KNOWN CONCEPTS

NLP, Machine Learning, Deep Learning, Vector DBs, Conversational AIs, MLOps, CI/CD, LLMs & Prompt Engineering, REST APIs, Data Engineering, Data Warehousing & BI, Version Management, Reverse Proxy, Conventional Commits, JWT, Agile, OOP & Design Patterns

## RESEARCH PUBLICATIONS

### ENHANCING CONVERSATIONAL AI MODEL PERFORMANCE AND EXPLAINABILITY FOR SINHALA-ENGLISH BILINGUAL SPEAKERS

DEC 2022

CONFERENCE: [4TH ICAC](#), PUBLISHER: IEEE, H-INDEX: 7, DOI: [10.1109/ICAC57685.2022](#)

## PROJECTS

### DIET LANGUAGE IDENTIFIER

MAY 2023

#### A FINE-TUNABLE DEEP LEARNING LANGUAGE CLASSIFICATION MODEL

[GitHub](#)

- Can scale up to any number of languages.
- Leverages the Rasa framework and fully supports fine-tuning.
- Easily integrated with existing Rasa conversational AIs.

### CODELESS BILINGUAL CONVERSATIONAL AI DEVELOPMENT SaaS PLATFORM

DEC 2022

#### IMPLEMENTATION OF THE UNDERGRADUATE RESEARCH

[GitHub](#)

- Presented at National Best Quality Software Awards (NBQSA) 2022
- Technology Stack: Python, Rasa, React, MongoDB, Docker, Azure, NGINX
- Implemented an Explanation AI (XAI) tool that yielded 100% impactful deep learning model explanations as the individual contribution.

## EDUCATION

### BSc (HONS) INFORMATION TECHNOLOGY SPECIALIZING IN DATA SCIENCE

MAR 2023

SLIIT, MALABE, SRI LANKA

- 1st Class Upper Division (CGPA: 3.85)
- 6 Dean's List Awards for best academic performance.