

Kirthika Senathiraja

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PROFILE

An enthusiastic individual who is presently working as a Data science Intern while pursuing a Degree in Artificial Intelligence and Data science, collaborated in projects to apply knowledge, while meeting the deadlines and project objectives in a team. Currently seeking new opportunities in working with projects that include exploring data and bringing new innovations through machine learning and deep learning algorithms.

EDUCATION

Final year BSc (Hons) Artificial Intelligence and Data Science | Information Institute of Technology (IIT), Sri Lanka
affiliated with Robert Gordon University (RGU), Scotland Anticipated May 2024

Third Year BSc (Hons) Artificial Intelligence and Data Science | Information Institute of Technology (IIT), Sri Lanka,
affiliated with Robert Gordon University (RGU), Scotland May 2023

- Deep Learning (A)
- Edge AI (A)

Second Year BSc (Hons) Artificial Intelligence and Data Science | Information Institute of Technology (IIT), Sri Lanka, affiliated
with Robert Gordon University (RGU), Scotland May 2022

- Machine Learning (A)
- Simulation and Modelling Techniques(B)
- Data Engineering (A)
- Data Science Group Project (B)
- Artificial Intelligence (A)
- Advanced Mathematics for Data Science (B)
- Object-Oriented Development (C)

First Year BSc (Hons) Artificial Intelligence and Data Science | Information Institute of Technology (IIT), Sri Lanka & affiliated
with Robert Gordon University (RGU), Scotland May 2021

- Computer Systems Fundamentals (A)
- Programming Fundamentals (A)
- Data Structures and Algorithms for Artificial Intelligence (A)
- Database Systems (A)
- Web Technology (A)
- Computational Mathematics (B)
- English Communication Skills (B)

Higher and Secondary Education | Belvoir College International, Sri Lanka August 2019
(IGCSE:4A*, A,2B & IAL: A, B,2C)

PROGRAMMING SKILLS

- Languages(advanced): Python, R, JavaScript, HTML
- Database/Server: My SQL, mongoDB
- Frameworks: Hadoop, Spark, TensorFlow, Scikit-learn, Pandas, Seaborn, NumPy NLTK, Node.js, ejs
- Cloud Platforms and services: AWS: Amazon sage maker, AWS Lambda, amazon event bridge, and Amazon ground truth labelling.

WORK EXPERIENCE

Data Science Intern, Ascentic Pvt Ltd, Sri Lanka May 2022 – Present

- **Onboarding project: Text classification using Twitter text data:** Identifying hateful comments in tweets using Machine learning algorithms in Python. Includes exploring, cleaning, and preprocessing data and finding a suitable ML algorithm.
- **Product-categorization, (Qvalia):** Collaborated with the team in developing a Deep learning Methodology on a retail

hierarchical taxonomy classification, and thus improving a language model performance on product categorization task.

- Analyzed and pre-processed **Postgre Database** containing 78 million data points **using DBeaver & Python**, identified Unique patterns in text features that had direct impact on business operations utilizing **Python, Seaborn, Excel and Matplotlib**.
- Experimented with different Machine learning models and Sequential Models such as **RNN, LSTM** and Pretrained models such as **BERT** for language classification tasks.
- Collaborated and **conducted Literature Review** on Research projects in retail domain. Successfully **presented the POC of a Machine Learning project with the team** and impressed clients.
- Performed data retraining for different multi-class categories with **AWS sage maker** and explore other services such as **S3 bucket, Text extract, Amazon Translate**

HIGHLIGHTED PROJECTS

- **Accident and Violence Detection at the Edge**, IIT Sri Lanka, Department of AI and DS March 2023-April 2023
Led a group of 4 members to develop a mobile application to run a CNN model on the edge. The application is capable on having inferencing at the end device and retraining of the model in the cloud using AWS Lambda, amazon event bridge, Amazon sage maker and Amazon ground truth labelling.
- **Image classification**, IIT Sri Lanka, Department of AI and DS November 2022-December-2022
Utilized and trained pre-trained models such as Beit and CNN models for image classification.
- **Data Science Group Project**, IIT, Sri Lanka, Department of AI and DS Sep 2021-April 2022
 - Led a group of 4 members to develop a website and an app for **diagnosing covid-19** using respiratory sounds.
 - Pre-processing a combination of audio data, creating, testing, and ensembling **CNN models** to identify positive individuals using python.
- **Data pipeline for the research article trend analysis**, IIT, Sri Lanka April 2022
The pipeline includes data cleaning and monitoring using the Hadoop ecosystem to deliver it into a dashboard application.
- **K-means cluster analysis with silhouettes of vehicles using R**, IIT, Sri Lanka March 2022
- **Identifying path using search techniques (Informed and Uninformed) in 8X8 matrix in python**, IIT, Sri Lanka Dec 2021
- **OMI game**, IIT, Sri Lanka, Department of AI and DS Dec 2020
Implemented Omi in **python and Java** providing GUI additionally.

KEY ACHIEVEMENTS

- **2nd Runner Up as a Team in TADHack 2021** September 2021
 - Mobile app and Website were created to diagnose Heart attacks, blood pressure by utilizing MERN Stack with TensorFlow enabling to scheduling appointments.
- **Participant, her<HelloWorld>v1.0 hackathon:Developed an online pet shop using Html and CSS** August 2021
- **The annual prize-giving recipient, Belvoir College International** February 2018-February 2020
 - Awarded for Excellence in IAL Mathematics & Awarded of Excellence for 3A*'S AND A (IGCSE) in annual prize-giving.

VOLUNTEER & LEADERSHIP

- **Volunteer to conduct online engagement sessions** as a Host for a team of 10, **Ascentic Pvt Ltd** June 2022 - Feb 2023
- **Volunteer, Knowledge Sharing Session**
 - Conducted a session on python about modules, packages, and Expectation handling to 20 industry members.
 - Conducted a presentation about internship experience for university students (KDU-General Sir John Kotelawala Defence University) for about 50 members.
- **Member & Volunteer, Rotaract Club** September 2020 -Present
 - **Chairperson**, We Can project: Community service project focusing on young women and sanitation.
 - Member, Ignite project: helping children with financial and other disabilities to enhance their education.