

SANJEEPAN SIVAPIRAN

✉ sanjeepan23@gmail.com  [sanjeepan23.github.io](https://github.com/sanjeepan23)  [Google Scholar](https://scholar.google.com/citations?user=sanjeepan23)  [sanjeepan23 in in/sanjeepan](https://www.linkedin.com/in/sanjeepan)

RESEARCH INTERESTS

My research interest lies in the areas of Machine Learning, Representation Learning, Software Safety and Privacy, Generative Modelling, and Applied AI

EDUCATION

University of Moratuwa, Sri Lanka

Oct 2018 - Jun 2023

B.Sc. Engineering (Hons) in Computer Science & Engineering

First Class Honors - GPA 3.76/4

In Dean's Honors List

Kilinochi Central College, Sri Lanka



Jan 2015 - Aug 2017

G.C.E Advance Level Examination

Distinctions in Combined Mathematics, Physics and Chemistry

Ranked **295th** at National level out of 250, 000 students - Top 1%

PUBLICATIONS

- Party Extraction from Legal Contract Using Contextualized Span Representations of Parties. **Sanjeepan .S**, Charangan .V, and Uthayasanker .T : *RANLP23 - Recent Advances in Natural Language Processing*. 
- Sentiment Analysis in Dravidian Code-Mixed YouTube Comments and Posts. **Sanjeepan .S**, Charangan .V, and Uthayasanker .T : *Working Notes of FIRE 2021 - Forum for Information Retrieval Evaluation, CEUR, 2021*. 

RESEARCH EXPERIENCE

Information Extraction from Documents Using Transformer Models | PyTorch, Deep Learning

Undergraduate, University of Moratuwa

Aug 2022 - Jun 2023

Advisor: Dr. Uthayashanker Thayasivam

- The goal of this project is to develop a Question-Answering(QA) system that can identify actual parties in a legal contract
- Built scripts to train, test, and evaluate the QA model using Transformer architecture (**RoBERTa**)
- Created an open-source legal party dataset with 1000 documents

Act-Sense: Human Activity Recognition using sensor data from wearables | LightGBM, Machine Learning

Undergraduate, University of Moratuwa

Jan 2023 - Jun 2023

Advisor: Dr. Kutula Gunasekara

- Created a machine learning model to identify Human Activity activities such as walking, biking, jogging, standing, upstairs, downstairs, and sitting in real time.
- Implemented a cross-platform mobile application to to the activity status

Gastrointestinal(GI) tract anomaly detection | CNN, Deep Learning

Undergraduate, University of Moratuwa

Oct 2020 - Feb 2021

Advisor: Dr. Charith Chitaranjan

- Trained a classification model on the given medical dataset to classify anomalies in the Gastrointestinal Tract using endoscopic imagery
- Implemented using Deep Convolutional Neural Network with transfer learning.

Predicting Druggable Proteins from Primary Sequence (amino acid sequence) | XGBoost, Machine Learning

Undergraduate, University of Moratuwa

Feb 2023 - Jun 2023

Advisor: Dr. Charith Chitaranjan

- Created a machine learning model to train a multi-class classifier to predict the Druggable Proteins
- Implemented scripts to extract and aggregate new features from the sequence

TEACHING EXPERIENCE

University of Moratuwa, Sri Lanka | Department of Computer Science and Engineering

Teaching Assistant

Aug 2022 - Jul 2023

- Modules: CS 3121 - Introduction to Data Science, CS 3630 - Deep Neural Networks
- Prepared and graded weekly quizzes, assignments, and mid-semester exams of 85 students.
- Facilitated and supervised the laboratory sessions for the students.

PROFESSIONAL EXPERIENCE

H2O.ai

Machine Learning Engineer

Jul 2022 - Present

- Working as a Core Engineer in developing Enterprise Large Language Models (LLMs)
- Created a signature detection and verification system using PyTorch that is currently being used by the largest bank in Australia processing 2 million documents daily
- Created a scalable, distributed Inference pipeline with in-house MOJO model

H2O.ai

Machine Learning Engineer - Intern

Dec 2021 - Jul 2022

- Implemented a machine learning model that can predict the Credit score using non-conventional data, +15% better accuracy than existing model

ExentAI

Machine Learning Engineer - Intern

Sep 2021 - Nov 2021

- Created a Sentiment and Emotion Analysis System from data collection to model deployment

RELEVANT COURSES

Machine Learning	A
Intelligent Systems	A
Software Engineering	A
Software Engineering Project	A
Data Mining and Information Retrieval	A
Differential Equations and Applications	A
Calculus for System modelling	A
Linear Algebra	A+
Research Development and Project	A+

AWARDS AND HONORS

Dean's Honors List - Outstanding academic performance in Semesters 04, 05, and 08. 2023

Google KickStart - 2020 - Got 3 rd in Sri Lanka in Round H 2020

Mahapola Higher Education Merit Scholarship - For outstanding performance in G.C.E A/L 2019

Nanajaya' Scholarship for A/L Achievers of 2020 - For outstanding performance in A/L. 2018

Best Patrol leader of the Year - Award for best patrol leader of 2nd Jaffna Scout Troop. 2014

SKILLS

Programming Languages	Python, Java, JavaScript, Bash, C++
Machine Learning	PyTorch, Sci-Kit Learn, Tensorflow, Keras
Web Development	HTML, CSS, NodeJS, ExpressJS, H2O-Wave
Mobile Development	React Native, Flutter, Dart
Databases	MySQL, MongoDB, Redis
Cloud	AWS, GCP, Heroku, NGINX, Jenkins
Tools	Git, Linux, Conda, Tmux, VSCode, Docker, FastAPI

OTHER

IELTS - 7.5

- L / R / W / S: 7.5 / 8.5 / 6.5 / 6.5