

Malini Kar

(+1) (669)294-3832
karmalini@gmail.com

Masters in Natural Language Processing, UC Santa Cruz 2023. Currently working on projects in Conversational AI and Machine Translation.

PROJECTS & ACHIEVEMENTS

Language Model Implementation on FriendsQA — Coursework

Uses a BERT transformer pre-trained on the SQUAD Dataset with other neural networks to improve language understanding of the FriendsQA Dataset. Coded in Python.

Machine Learning of Deformable Mirrors in Adaptive Optics — Capstone Research Project

Explores the use of Deep Learning Techniques to control deformable mirrors in an adaptive optics setup. Coded in python and MATLAB. Completed at Rochester Institute of Technology, USA.

Notes Summarizer with Speech Recognition — Coursework

Web app to summarize notes and uses voice verification to unlock. Performs extractive text summarization using the BERT transformer and Word2Vec Embeddings. Uses a CNN-RNN for acoustic modeling as part of an end-to-end automatic speech recognition pipeline.

Marine Litter Detection — Coursework

Comparing SSD and YOLOv4 algorithms on TRASHNET dataset and testing marine litter images through the trained model. Assigns litter level based on number of items detected. Coded in Python.

Stress Monitoring & RS — Hackathon Project

Team Leader. Includes a recommendation system and data analysis in Python, and a Web Interface with forms in JS for data collection.

EDUCATION

UC Santa Cruz, California — MS in NLP

September 2022 - 23

VIT, Vellore — B.Tech. in Electronics & Communication

July 2018 - May 2022

Class Representative 2019-2020. Specialization in sensors and wearable technology. Ex-core member of IETE Student chapter. CGPA: 9.04

Final year project completed at Rochester Institute of Technology, NY.

January 2022 - May 2022

HARD SKILLS

Python. R. SQL. C/C++. Java. Javascript. MATLAB.

Machine Learning & Deep Learning. (TF Keras, PyTorch)

Natural Language Processing. (NLTK, Spacy, Gensim.)

Data Analytics (Data processing and visualization).

Data Structures & Algorithms.

Applied Mathematics (Linear Algebra, Multivariable Calculus, Statistics).

SOFT SKILLS

Team Player.

Creative.

Good Listener.

Adaptable.

INTERESTS

Artificial Intelligence.

Data Science.

Computer Graphics.

LANGUAGES

English. Hindi. Bengali.