Mallika Subramanian

@ mallika.subramanian@students.iiit.ac.in | mallika2011 | mallika-subramanian-2607b116b | mallika2011.github.io

EDUCATION

IIIT HYDERABAD
B.Tech. with Honours in Computer Science Engineering
2018-2022 | CGPA: 9.48

TECHNICAL SKILLS

Languages
C, C++, Python, Java, Bash, HTML5, CSS, Javascript, JQuery

Frameworks
PyTorch, Tensorflow, Django, MATLAB, Flask, React JS, React Native, Express, NodeJS, Android Studio

Databases
MySQL, MongoDB, PostgreSQL

COURSEWORK

INSTITUTE COURSES
Data Structures & Algorithms
Machine Data & Learning
Operating Systems
Probability & Statistics
Data and Applications [Also a TA]
Statistical Methods in AI
Info. Retrieval & Extraction
Digital Image Processing
Computer Vision
Human Computer Interaction

POSITIONS

Lean In IIITH:
Admin for the IIITH chapter.
Ping! IIITH:
Magazine's Creative Director.

ACHIEVEMENTS

Dean's List Awardee:
Top performer for 2018-20.
Middle East region Topper
Secured 98.4% in AISSCE (CBSE'18)

EXPERIENCE

GOOGLE INDIA | Software Engineering Intern
May. 2021 – July. 2021 | Bangalore, IN

- Worked with the GSeekh team for the Read Along android app.
- End-to-end implementation of a new and unique feature enhancing the app.
- Leveraged Google's LaMDA language model specific to the app's use case.
- Incorporated the Google Cloud APIs for Speech Recognition and Text-to-Speech.
- Tech Stack used: Java, Protocol Buffers, Stubby Clients, Android.

GOOGLE INDIA | STEP Intern
May. 2020 – June. 2020 | Bangalore, IN

- Worked with the Google Maps, Megamind Team and built a Time Lapse Visualiser. The project is a web application that can be used to visualise customizable geographic datasets.
- Tech Stack used : ReactJS, Django REST frameworks, GMaps API Project Demo

MICROSOFT ENGAGE | Mentee: Program Engage 2020
July. 2020

- Worked with a team of 4 to build an AI driven Tic Tac Toe with incremental levels of difficulty under the guidance of the mentors at Microsoft.

MAJOR PROJECTS

REVIEWS SENTIMENT ANALYSIS
Built a text classifier for sentiment analysis using BERT, Huggingface and PyTorch for a data set of Google Play Reviews about technology apps and products.

ANUVAAD MACHINE TRANSLATION
An English to Hindi neural machine translation implementation built using LSTMs and GRUs on the well known IITB corpus.

LINUX C-SHELL
A fully functional Linux shell built in C, that supports redirection, piping, environment variables, background and foreground process execution etc.

REFLECTION REMOVAL
Implemented an algorithm that performs post-processing on images to remove reflection artifacts leveraging ghosting cues that arise from double shifted reflections.

SPOTIFY RECOMMENDER
A recommender system built with a dataset of 40,000 Spotify playlists using network embeddings and clustering approaches.

MAZE - WIKI SEARCH ENGINE
A search tool built in python, on a standard dump of Wikipedia articles. Uses a corpus of approximately 40GB data. Supports two kinds of queries - normal queries and field queries.

VJ FACE DETECTOR
A face detector based on the Viola Jones algorithm that uses Haar features, integral images and adaboost training.