MAYANK MUSADDI

Undergrad Computer Science Student at IIIT Hyderabad

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EXPERIENCE

Machine Learning Intern — June 2021 – July 2021
Sprinklr, Inc. | sprinklr.com — Gurgaon, India

- Created a pipeline for knowledge distillation of large models for language modelling task. Used it to distill large RoBERTa and XLM-RoBERTa models fine-tuned on Twitter specific data, to smaller pre-trained distilRoBERTa model which is half the size and twice as fast.
- Created a web application to host and visualize models and datasets that is used by the Sprinklr AI team, using Python Streamlit.

Machine Learning Intern — May 2019 – July 2019
VISIRIS Innovation(P) Ltd. | visiris.in — T-Hub, Hyderabad, India

- Automated data harvesting from live Football Match Telecast using Python OpenCV, MATLAB and Flask. Data like player positions, team classification, types of passes and the location of ball and goal post was fetched from the match images using concepts of Morphology and Homography.

Bioinformatics Research — May 2019 – Ongoing
CCNSB Lab, IIIT-H | ccnsb.iiit.ac.in — IIIT Hyderabad, India

- Working as a research student under Professor Nita Parekh (link to bio)
- Created **NetREx**, an end to end web application for data visualisation of dense networks of Gene Coexpression Data using Sigma JS, Express JS and Docker (application link)

Software Engineering Intern — Aug 2018 – Mar 2019
IIIT-H Product Labs | iiit.ac.in — IIIT Hyderabad, India

- Built an end to end application for Document Scanning to automate data entry from handfilled form data by providing UI for template creation and data extraction using OpenCV, SIFT transformation and OCR.

Teaching Assistant — Sep 2019 – Ongoing
Computer Courses, IIIT-H | iiit.ac.in — IIIT Hyderabad, India

- Assisted in teaching the courses Computer Programming, Software Architecture and Distributed Systems.

PROJECTS

C - Shell A terminal-based shell using C supporting piping, redirection, signal handling, background and foreground process management.

Spatial Transcriptomics Embeddings A hyperbolic graph neural network approach to identify hierarchies in cell types from spatial transcriptomics data obtained from seqFISH+.

Deep Variational Metric Learning
Implementation of a paper that provides an innovative approach for modelling a deep metric learning algorithm using Tensorflow.

Parallel Random Number Generator Algorithms for generating random numbers in parallel and their application in Monte Carlo Simulations.

Parallel Algorithms Parallel implementation of Quicksort, Mergesort and Bellman Ford using C++ MPI, C Pthreads, JAVA RMI and Erlang.

E - Commerce Platform A Shopping WebApp using Python Flask, Sqlite3.

Quiz Portal A web-based quiz portal using Golang & ReactJS.

Felicity App Official Fest app for Felicity 20, created using Flutter.

Graphics and Games Created a set of 3D and 2D games like Plane Simulation and Subway Surfer Replica using OpenGL and WebGL.

EDUCATION

B.Tech in Computer Science (MS by Research)
Apr 2017 – May 2022
IIIT Hyderabad
GPA : **9.39/10** Overall
GPA : **9.58/10** in Computer Science Courses

ISC Class XII
Don Bosco Park Circus
Percentage : **95.75**%

ICSE Class X
Don Bosco Park Circus
Percentage : **94.20**%

ACHIEVEMENTS

- **IIT-JEE 2017** Ranked 4219 out of 1.2M candidates (Mains) and 3331 out of 0.2M candidates (Advanced)
- **Dean's List** Selected for excellence in academics (Top 5% in batch) for all semesters
- **CodeForces** (link to profile)
  Ranked 1k among 23k participants in India
  Maximum Rating 1741
- **Google Kickstart Coding Competition**
  Ranked under 500 out of 2500 candidates.

POSITIONS

- **Elected Member of Student's Parliament**
  IIIT H, Apr 18 - Mar 19
- **Organising Member, Felicity**
  Annual Fest for IIIT-H 2018-2020
- **App Team Head** Headed Felicity App Creation
- **Overall Design Team Head** IIIT Hyderabad

TECHNICAL SKILLS

C/C++ STL | Python | React Js | Node Js | Sigma Js | jQuery AJAX | Flask | GoLang | MySQL | GNU/Linux Bash | Docker | Tensorflow | Pytorch | Java | GIT

RELEVANT COURSEWORK

- **Computer Science**
  Computer Programming, Data Structures, Algorithms, Operating Systems, Data Systems, Graphics, Software Architecture, Computer System Organisation, Statistical Methods in AI, Distributed Systems, Optimization Methods, Computer Vision, Principles of Information Security, Distributing Trust & Blockchains, Introduction to Game Theory
- **Maths**
  Discrete Maths, Group Theory, Linear Algebra, Probability & Statistics, Complex Numbers, Multivariate Analysis