AAYUSH GOYAL

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EDUCATION

Indian Institute of Technology, Hyderabad

Bachelor of Technology - Electrical Engineering

July 2018 - Present Present CGPA - 8.4/10

Related Coursework: AI & ML, Algorithms, Statistical Learning, Internet Of Things, Drones, Digital Signal Processing, Probability & Stochastic Processes, Linear Algebra, Digital Modulation, Digital Design, Communication Theory, Electronic Devices, Analog Electronics, MOS Transistors,

Mount Carmel School Dwarka, New Delhi

 $Higher\ Secondary\ School$

April 2016 - May 2018

Overall Percentage: 93.60

Mount Carmel School Dwarka, New Delhi

Secondary School

April 2016 Overall CGPS: 10

RESEARCH PROJECTS

Estimating network performance using GNN

Under Dr Sai Dhiraj Amuru (Department of EE, IITH)

July 2020 - Present

- Working on a GNN algorithm that estimates the resulting per-source-destination mean per-packet delay given a network topology and its configuration.
- Working for submission to GNNet Challenge 2020 in ITU AI/ML in 5G Challenge.

Wireless User Localization

February 2020 - Present

Under Dr Sai Dhiraj Amuru (Department of EE, IITH)

- Working on a **Self-Supervised Learning** algorithm that can determine the position of a user, based on estimated channel frequency responses between the user and an antenna. array.
- Working for submission to IEEE CTW 2020 Data Competition & EE Independent Project in 4th Semester.

WORK EXPERIENCE

REPAYR, Hyderabad

September 2019 - November 2019

Development Intern

· Worked on development of **Repayr android applications** for this startup. This app provides the convenience of booking vehicle repair/service from anywhere by assigning it to the nearest vendor/mechanic. This follows an easy step process with options to track your repair service

TECHNICAL STRENGTHS

Software & Tools
Programming Languages
Additional Coursework

Pytorch, Keras, Vim, LATEX, Android Studio, Matlab, Git

Python, C/C++, Java

Machine Learning by Andrew NG Algorithms by Princeton University

PROJECTS

Independent Projects (For Self Learning)

- Implemented various CNN, DCGAN & RNN models using Pytorch and Tensorflow
- Worked on image captioning on Flickr 8K dataset
- Designed a physical activity monitoring device assisted with an android app
- Implemented various ML algorithms on Regression, Classification, Clustering, Reinforcement, Associated Rules, etc from scratch.
- Designed a device that tracks the timer of a washing machine and displays it in an android application (1^{st} Semester Independent Project.
- Designed a GPS controlled quad-copter (Drone)

Car Damage Detection (May 2020)

Aim: Implemented a deep learning algorithm(YOLO based) that detects dents and scratches on exterior of a vehicle. Compressed existing networks to make it suitable to be run on any standard smartphone saving the expenses of a dedicated server.

IITH Dashboard (May 2019)

Aim: Designing a **one stop destination for IITH Students**. The app displays Mess Menu, Bus Schedule, send lecture reminders and matches people for cab sharing.

This app is being actively used by 1500+ users at IITH. This was done under Lambda Club, IITH

ACHIEVEMENTS

- Achieved All India Rank 1872 among 2 Lakh shortlisted candidates in JEE Advanced Examination conducted by JAB.
- Achieved All India Rank 1913 among 12 Lakh candidates in JEE Mains Examination conducted by CBSE.