


Yudhik Agrawal

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EDUCATION

IIIT HYDERABAD, INDIA

B.TECH & M.S (BY RESEARCH) IN
COMPUTER SCIENCE & ENGINEERING

AUGUST 2016 - APRIL 2021

Cum. GPA : 8.95 / 10

M.S GPA : 9.75 / 10

ACHIEVEMENTS

- **Dean's list awardee** for excellence in academics awarded to **top 5%**.
- Selected for the **Google AI Summer School, 2020** - Top 50 students in India.

SPORTS PROGRAMMING

- **Google Kickstart:** Secured **159th** Rank in 2019 round-F.
- **ACM ICPC:** Member of team **Brahmasmi** which secured **35th** Rank in ACM-ICPC 2019 online round.

Codechef: // yudhik Best: 2075

Codeforces: // yudhik Best: 1946

HACKATHONS

- **Amdocs'19 Winner** of Amdocs HackFest out of 5000 teams.
- **Alexa'18:** Ranked **3** in the Techgig CodeGladiator out of 3000 teams.

SKILLS

PROGRAMMING

- C/C++(STL) • Python • Bash
- MATLAB • JAVA • JavaScript

TOOLS & FRAMEWORK

- PyTorch • Tensorflow • Flink
- \LaTeX • AWS • GIT • MySQL

COURSEWORK

Data Structures & Algorithms

Artificial Intelligence

Machine Learning

Optimization Methods

Computer Vision

Computer Graphics

Image Processing

Discrete Mathematics

Number Theory & Graph Theory

Advanced Computer Networks

Operating Systems

Database System

Distributed Systems

Computer System Architecture

Information Security

EXPERIENCE

SUMMER ANALYST | GOLDMAN SACHS

May 2020 – July 2020 | Bengaluru, India

Worked on Data Ingestion Enhancements in Data Pipeline Framework, and did further exploration which would benefit the project in future.

RESEARCH ASSISTANT | COGNITIVE SCIENCE LAB, IIIT-H

January 2020 – Present | Hyderabad, India

Currently working with Prof. Vinoo Alluri, on using music-induced movements to identify individual traits and also, improving song recommendation system.

RESEARCH ASSISTANT | CENTER FOR VISUAL INFORMATION TECHNOLOGY, IIIT-H

May 2018 – July 2020 | Hyderabad, India

Worked with Prof. Avinash Sharma, on 3D-Human Body Reconstruction, Registration and generating Temporally coherent Sequence of Human Action.

TEACHING ASSISTANT | IIIT-H

August 2018 – May 2020 | Hyderabad, India

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| • CSE481 - Optimization Methods | Spring 2020 |
| • CSE251 - Graphics | Monsoon 2019 |
| • IEC239 - Digital Signal Analytic and Application | Spring 2019 |
| • ICS101 - Computer Programming | Monsoon 2018 |

The work involves explaining concepts of programming in tutorials, grading, making problem sets and, taking lectures.

PROJECTS

DEEP 3D-HM GUI | PYTORCH, 3D RECONSTRUCTION, TKINTER

Developed a Tk GUI toolkit which finds 3D mesh of a human body from a monocular RGB Image/Video using state-of-the-art Deep Learning network.

STACK OVERFLOW USERQUERY | TENSORFLOW, NLP, DJANGO

Developed a search bar on top of the StackOverflow API which provides more relevant thread results based on the search and also re-order the answers based on various NLP techniques like text-similarity(USE), statistical analysis and semantic analysis.

AMDOCS VIDALYSIS | PYTHON, API, SCRIPTING

Developed a Software-as-a-Service which can analyze/interpret the video, trimming relevant part of the video and can also search through video using image or text.

TIC-TAC-TOE BOT | PYTHON, ARTIFICIAL INTELLIGENCE

Developed a bot capable of playing advanced version of Extreme Tic-Tac-Toe using alpha beta pruning, custom heuristics and zobrist hashing.

LINUX MINI SHELL | C, OPERATING SYSTEMS

Developed a Bash like terminal in C using Linux system calls which includes user-defined commands, piping and redirection and signal-handling.

PUBLICATIONS

- [1] Neeraj Battan*, **Yudhik Agrawal***, Samyak Jain, Veeravalli Saisooryarao, Aman Goel, Avinash Sharma: GlocalNet: Class-aware Long-term Human Motion Synthesis, **WACV, 2021**.
- [2] **Yudhik Agrawal**, Samyak Jain, Emily Carlson, Petri Toiviainen, Vinoo Alluri: Towards Multimodal MIR: Predicting individual differences from music-induced movement, **ISMIR, 2020**.