


Yudhik Agrawal

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EDUCATION

IIIT-HYDERABAD

B.TECH & M.S (BY RESEARCH) IN
COMPUTER SCIENCE & ENGINEERING
CGPA : 8.95 /10 (B.Tech), 9.75 /10 (M.S)

PUBLICATIONS

ISMIR'20

TOWARDS MULTIMODAL MIR:
PREDICTING INDIVIDUAL DIFFERENCES
FROM MUSIC-INDUCED MOVEMENT

Yudhik Agrawal , Samyak Jain, Emily
Carlson, Petri Toiviainen, Vinoo Alluri

ICCVW - 3DRW'19

HUMANMESHNET: POLYGONAL MESH
RECOVERY OF HUMANS
Abbhinav Venkat, Chaitanya Patel, Yudhik
Agrawal , Avinash Sharma

ACHIEVEMENTS

SPORTS PROGRAMMING

Google Kickstart: Secured 159th Rank in
2019 round-F.

ACM ICPC'19: Member of team
Brahmasmi which secured 35th Rank in
ACM-ICPC online round.

Codechef: // yudhik Best: 2173
Codeforces: // yudhik Best: 1893

ACADEMICS

Dean's list awardee for excellence in
academics awarded to top 5%.

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 and Algorithms ,
Computer Vision , Optimization Methods,
Artificial Intelligence , Machine Learning ,
Advanced Computer Networks,
Operating Systems , Distributed Systems
, Computer System Architecture, Software
Analysis and Design, Graph Theory and
Group Theory , Database System,
Graphics, Mobile Robotics

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.

MINI DROPBOX | PYTHON, SOCKET PROGRAMMING

Implemented a threaded HTTP proxy server with LRU caching and mutex locks for
multiple clients, implemented using python socket programming.

TUNNEL RUSH | C(OOPS)

Created a 3D game consisting of almost all salient features of the popular video game
The Game Legend of Zelda using OpenGL and other OOP concepts in C++.