

# Yudhik Agrawal

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## EDUCATION

### INTERNATIONAL INSTITUTE OF INFORMATION TECHNOLOGY, HYDERABAD

B.TECH IN COMPUTER SCIENCE AND  
ENGINEERING (MAY 2021)

CGPA: 8.84/10

## PUBLICATIONS

### ICCVW - 3DRW'19

HUMANMESHNET: POLYGONAL

MESH RECOVERY OF HUMANS

Abbhinav Venkat, Chaitanya Patel,

Yudhik Agrawal, Avinash Sharma

## ACHIEVEMENTS

### SPORTS PROGRAMMING

Google Kickstart: Secured rank **292**  
in Round-D and **326** in Round-E 2019.

Codechef: yudhik,

Highest Rating: **2075**.

Codeforces: yudhik,

Highest Rating: **1743**.

### 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

- C/C++(STL) • Python • Bash
- JavaScript • Django • Flask
- PyTorch • Tensorflow
- MATLAB • 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

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

May 2018 – Present | Hyderabad, India

Currently working under Professor Avinash Sharma, on 3D Shape Analysis using  
Deep Learning Reconstruction, Registration, Texture and Clothing Recovery.

### RESEARCH STUDENT | ROBOTICS RESEARCH CENTER, IIIT-H

April 2018 – May 2019 | Hyderabad, India

Currently working under Dr. K. Madhava Krishna, on avoiding Drone Collisions by  
Path Planning after doing 3D reconstruction of the surrounding obstacles(eg.  
Humans) which need not be static.

### TEACHING ASSISTANT | IIIT-H

May 2018 – Present | Hyderabad, India

- Computer Programming | Monsoon 2018
- Digital Signal Analytic and Application | Spring 2018
- Graphics | Monsoon 2019

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

## PROJECTS

### DEEP 3D-HM GUI | PYTORCH, 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, PYTHON, 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++.