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: **1834** .
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, 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++.