

# Yudhik Agrawal

yudhik100@gmail.com | +91 8179700845 |  yudhik11

## EDUCATION

### IIIT HYDERABAD, INDIA

B.TECH & MS (BY RESEARCH) IN  
COMPUTER SCIENCE & ENGINEERING  
MAY 2021

Cum. GPA : 8.95 / 10

M.S GPA : 9.75 / 10

Dean's List awardee

## TECHNICAL SKILLS

### LANGUAGES & SKILLS

- C/C++(STL) • Python • JAVA
- Data Structures and Algorithms

### WEB

- HTML • CSS • JavaScript
- Flask • MySQL

### TOOLS & FRAMEWORK

- PyTorch • Tensorflow • OpenCV
- Kafka • Flink • AWS • GIT

### OTHERS

- Bash • Kubernetes • REST

## MINOR PROJECTS

### DEEP 3D-HM GUI

#### PYTORCH, 3D RECONSTRUCTION

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 using StackOverflow API providing more relevant results by applying various NLP techniques like text-similarity(USE), statistical analysis and semantic analysis.

### LINUX MINI SHELL

#### C, OPERATING SYSTEMS

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

## ACTIVITIES

### PROGRAMMING CLUB COORDINATOR

Responsible for hosting contests and giving seminars from basic to very advanced topics.

### RESEARCH ASSISTANT

- Cognitive Science Lab, IIIT-H
- Center for Visual IT, IIIT-H

### TEACHING ASSISTANT

- Computer Programming
- Optimization Methods • Graphics
- Digital Signal Analytics & Appl.

## EXPERIENCE

### GOLDMAN SACHS | ASSOCIATE

July 2021 – Present

**PRODUCT DATA STREAMING** : Platform responsible for delivering high quality data services to enable and power the firm

- Conceptualised and implemented **AI framework to solve a general entity resolution problem** which proposes static rules on evolving dynamic data for the reconciliation of financial products, **reducing manual efforts by 80%**
- **Designed firmwide financial instruments'** data model by collaborating with global business partners and technologists across several domains
- Enhanced ETL flow for financial data by **replacing legacy codebase** with scalable architecture thus **increasing performance by 50%**
- Successfully transformed legacy reconciliation processes by developing a **robust Python framework integrated with a K8s cluster** and memSQL database, resulting in enhanced code organization and streamlined job execution, thereby **completely eliminating the need for manual interventions**
- Mentored new hires by ramping them up with functional understanding of derivative products and backend codebase

**ALLOY STREAMING** : Self-Service hosted ETL platform to let users configure and monitor their data pipelines

- **Enabled new business** by implementing relational sink (MSSQL) for ETL flow
- Developed ETL platform's validation by allocating resources per user to ensure consistent availability by **decreasing downtime significantly**
- **Set up Kafka servers** to perform acceptance testing for the clients' pipelines

### GOLDMAN SACHS | SUMMER ANALYST

May 2020 – July 2020

- Enhanced Data Ingestion process in Data Pipeline Framework by adding Rest API & S3 as a source and AVRO reader
- **Researched and documented** inferences for future scope of core project

## PUBLICATIONS

- [1] **Yudhik Agrawal**, Emily Carlson, Petri Toiviainen, Vinoo Alluri; Decoding Individual differences and musical preference via music-induced movement; **Nature Scientific Reports (SciRep)**, 2022.
- [2] **Yudhik Agrawal**, Ramaguru Guru Ravi Shanker, Vinoo Alluri; Transformer-based approach towards music emotion recognition from lyrics; **ECIR**, 2021.
- [3] Neeraj Battan\*, **Yudhik Agrawal\***, Veeravalli Saisooryarao, Aman Goel, Avinash Sharma; GlocalNet: Class-aware Long-term Human Motion Synthesis; **WACV**, 2021.

## AWARDS & HONORS

### RESEARCH

- Research list awardee for excellence in research and publishing papers.
- Selected among top 50 students in India for Google AI Summer School, 2020.
- Receiver of Fellowship from Huawei Scholarship of Excellence 2020-21.

### SPORTS PROGRAMMING

- Google Kickstart: Secured 159<sup>th</sup> rank in 2019 round-F.
- ACM-ICPC 2019: Secured 35<sup>th</sup> rank in 2019 online round (Team - Brahmasmi).
- Codeforces : yudhik [ Best: 1946 ]                      Codechef : yudhik [ Best: 2147 ]

### HACKATHONS

- Amdocs'19: Winner of Amdocs HackFest out of 5000 teams.
- Alexa'18: Secured 3<sup>rd</sup> rank in the Techgig CodeGladiator out of 3000 teams.