

# Yudhik Agrawal

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## EDUCATION

### IIIT HYDERABAD, INDIA

B.TECH & MS IN COMPUTER SCIENCE

MAY 2021

Cum. GPA : 8.95

M.S GPA : 9.75

Dean's List awardee

## SKILLS

### PROGRAMMING

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

### MACHINE LEARNING TOOLS

- PyTorch • Tensorflow • Pandas

### FRAMEWORKS

- Kafka • MySQL • AWS • GIT
- Kubernetes • Bash • REST

## LICENSES

- Machine Learning Modeling Pipelines in Production
- Machine Learning Data Lifecycle in Production
- Data Analysis Using Pyspark
- Learn Embeddings and Vector Databases

## MINOR PROJECTS

### STACK OVERFLOW USER QUERY

| TENSORFLOW, NLP, DJANGO

Developed a search bar using StackOverflow API which provides more relevant results, making it 30% more engaging, by using techniques like text-similarity (USE), statistical analysis and semantic analysis.

### DEEP 3D-HM GUI

| PYTORCH, 3D RECONSTRUCTION

Designed 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.

## ADDITIONAL EXPERIENCE

### RESEARCH ASSISTANT

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

### TEACHING ASSISTANT

- Computer Programming
- Optimization Methods • Graphics
- Digital Signal Analytics & Application

### PROGRAMMING CLUB COORDINATOR

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

## EXPERIENCE

### GOLDMAN SACHS | ASSOCIATE

July 2021 – 2024 (Present)

**PRODUCT DATA ENGINEERING** : As an Associate, led a small team of 4, and delivered high quality data services that empowered the firm

- **Conceptualised and implemented AI framework** to address a general entity resolution challenge on evolving data, **reducing manual efforts by 95%**
- Achieved a remarkable **120x performance benchmark increase** by reinventing a record linking process, enhancing system scalability and availability
- Transformed legacy reconciliation processes into a **Python framework integrated with a K8s cluster**, enhancing code organization and streamlining job execution, thereby **eliminating the need for manual interventions**
- Enhanced financial data pipelines by **replacing legacy ETL processes** with scalable architecture, resulting in an **80% performance boost**
- Mentored new hires by ramping them up with functional understanding of derivative products and backend codebase

**ALLOY STREAMING** : Worked as an Analyst on a self-service hosted ETL platform which let users configure and monitor their data pipelines

- Implemented a relational sink (MSSQL) for ETL flow, **enabling new business opportunities** and enhancing data processing efficiency
- Devised resource allocation strategies resulting in a **substantial 75% decrease in downtime**, ensuring consistent availability and operational reliability
- **Configured Kafka servers** for acceptance testing of clients' pipelines, improving the efficiency and reliability of data processing workflows

### GOLDMAN SACHS | SUMMER ANALYST

May 2020 – July 2020

- **Enhanced Data Ingestion process** in Data Pipeline Framework by adding Rest API & S3 as a source, along with providing support for AVRO files
- **Researched and documented** findings to achieve parallelisation, reducing processing time by 40%

## PUBLICATIONS

- [1] **Yudhik Agrawal**, Emily Carlson, Petri Toivainen, Vinoo Alluri; Decoding Individual differences and musical preference via music-induced movement; **Nature Scientific Reports (SciRep)**, 2022.
- [2] **Yudhik Agrawal**, Ramaguru 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

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