# Ayush Pande

Computer Science & Engineering Indian Institute of Technology, Kanpur

#### **Publications**

[1] Ayush, Pande and Gaurav Sharma. "ViSt3D: Video Stylization with 3D CNN". In: Advances in Neural Information Processing Systems 36 (2024). URL: https://neurips.cc/virtual/2023/poster/72962.

#### **EDUCATION**

| Year         | Degree                        | Institute                                | CPI/%   |
|--------------|-------------------------------|------------------------------------------|---------|
| 2020-Present | MSR-PhD Dual                  | Indian Institute of Technology, Kanpur   | 9.0/10  |
| 2015-2019    | <b>B.E.</b> /(Computer Engg.) | Rajiv Gandhi Proudyogiki Vishwavidyalaya | 7.56/10 |
| 2013-2014    | $CBSE(12^{th})$               | Advanced Academy, Indore (M.P.)          | 89.8%   |
| 2011-2012    | $CBSE(10^{th})$               | $Advanced\ Academy, Indore (M.P.)$       | 9/10    |

#### **PROJECT**

1. Predicting the Drug Resistance in Mycobacterium tuberculosis (CS690A) Guide: Prof. Hamim Zafar (Sep'20-Oct'20)

The conventional approach of culture based antimicrobial susceptibility testing requires very long time (weeks to months) to determine the resistance/susceptibility of a certain TB isolate. From whole genome sequences mutations are inferred and the mutations are used as features for classifying an isolate as susceptible or resistant.

- Predicting the resistance of 10 drugs for the given absence or presence of different 222 mutations of the test sample.
- Used xgboost, SVM etc and ANN's for predicting the resistance value of different drugs for a given sample. Handled missing values, class imbalance in the dataset.
- 2. Study and analysis of the effect of Covid-19 lockdown on Air Quality in India (CS685A)Guide: Prof. Arnab Bhattacharya (Sep'20-Dec'20)
  - Analysis of the AQI levels and the corresponding prominent pollutants responsible for the AQI level across multiple cities about 22 for the year 2019.
  - analyse the AQI levels prior, during and post lockdown in time periods of week, month and lockdown phase.
  - Predict the AQI levels for the duration of the nationwide lockdown if the lockdown hadn't been enforced for a set of five cities by considering the AQI data available from the year 2016 to 2019.
  - Applied different correlation tests like Kendall tau, Spearman and significance test name Wilcoxon signed rank test.
- 3. FACER(Undergraduate Project) Guide: Prof.Pratiksha Asati

(Jan'18-Apr'19)

- Extract an individual's images from directory containing multiple images whether the person is present in group of individuals or alone. Then, save those images in separate directory.
- Find Duplicate Images in a Directory containing numerous images.
- Implemented Real Time Face Recognition.

#### Relevant Courses

- 1. Introduction to Machine Learning
- 2. Topics in Probabilistic Modeling and Inference
- 3. Computational Genomics

Email: ayushpande202@gmail.com

Personal Url: ayush202.github.io

# 4. Data Mining **Technical Skills**

• Languages: C, JAVA (proficient), Python

• Data Analysis : Pandas

• IDE: Netbeans 8.1, PyCharm, IntelliJ IDEA

### Awards and Achievements

1. All India Rank 261 in GATE CS 2020,total 97481 candidates appeared for the exam.

- $2. \ \ Secured\ 615th\ rank\ in\ Pre-Elimination\ round\ of\ SNACKDOWN\ 2017\ in\ 21,038\ teams\ from\ 103\ countries.$
- 3. Qualified in Google Code Jam for Round 1 in 2017 among 18,000 participants out of 64,000 participants.
- 4. Qualified in Google Code Jam for Round 1 in 2018 among 14,000 participants out of 62,000 participants.
- 5. Secured rank under 700 in TCS Codevita 2017 Round 1 from participation of 99,473 in August 2017.
- 6. Secured 1st position in CodeIt coding competition by LrNiz Software Solutions organized by CSI.
- 7. Competitive Programmer at Codechef with maximum 4 star rating.

## EXTRA CURRICULARS

- 1. Secured first position in Badminton Tournament at Inter-IIT Sports Meet 2022.
- 2. Secured second position in Inter Collegiate Badminton Tournament of RGPV organised by SGSITS College.
- 3. Secured Second position in Interhouse Maths Quiz in class 10th in the school.