



Ayush Raj Mehrotra
Electrical Engineering
Indian Institute of Technology Bombay
Specialization: Communication and Signal Processing

17D070034
UG Second Year
Male
DOB: 07/02/1999

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2019	0.00

SCHOLASTIC ACHIEVEMENTS

- Achieved an **All India Rank of 510** among **1,60,000 candidates** in JEE Advanced 2017 [2017]
- Secured **99.75** percentile in JEE Main 2017 among **1.2 million candidates** [2017]
- Awarded the **Scholarship for Higher Education** under **INSPIRE** for being in **top 1%** of CISCE board [2016]
- Recipient of the prestigious **KVPY fellowship** (SA stream) conducted by the Indian Institute of Science(IISc) [2014]
- Secured admission to the **Indian Statistical Institute** for B.Math after multiple screening rounds [2016]
- Attended the **Vijyoshi camp** at IISER Kolkata organized by IISc Bangalore [2015]
- Pursuing **Minor degree in Computer Science and Engineering** [Present]

KEY PROJECTS

EmoTV | INSTITUTE TECHNICAL SUMMER PROJECT

[Summer 2018]

Project under Web and Coding Club

- Implemented **speech to text** and **text to speech** operations on python using **OpenCV Google and gtts API**
- Developed Visual Studio app for Kinect sensor to track and respond to **skeletal movements** and record **audio**
- Classified human expressions from a test dataset into 'happy' and 'sad' using **Keras API**, achieving a **60%** accuracy

MACHINE LEARNING | SUMMER OF SCIENCE

[Summer 2018]

Project under Maths and Physics Club

- Explored fundamentals of Machine Learning and statistical concepts like **risk minimization** in Bias Variance tradeoff
- Studied about PCA feature extraction and Adaboost, Perceptron and Decision Trees **classification algorithms**

FAQ BOT | SUMMER OF CODE

[Summer 2018]

Project under Web and Coding Club

- Compiled a vast list of **intents** and **entities** on IBM Watson Assistant to mimic the interface of the desired chatbot
- Implemented a chat interface with **Flask-WTF** extension for **frontend** that sends an input string to the NLU engine
- Performed **web scraping** using 'Beautiful Soup', and incorporated the **NLU engine** to run the bot on localhost

PONG

[December 2017]

Self Project

- Effected the pong game in Python using '**simplegui**' library and **event handlers** for mouse clicks and key presses
- Developed code for modelling the ball's **collisions and reflections**, score keeping, **velocity control** for the ball and paddles, canvas (play area) construction and randomization of the ball's motion at the start of each round

POSITION OF RESPONSIBILITY

Coordinator | Media and Public Relations | Student Alumni Relations Cell (SARC) [Present]

- Organized the telephonic marathon event **Phonathon** and cordially interacted with over **600 alumni**
- Accountable for co-authoring the monthly newsletter '**The Knowledge Tree**' having a reach of over **50,000 alumni**
- Ideated the web content for the SARC flagship event '**Alumination**' attended by 200+ alumni and 1000+ students
- Authored multiple articles for '**SARC Blog**' showcasing the inspirational accomplishments of various alumni
- Composed questionnaires and handled interviews for the initiative '**Know Your Alumni**'

EXTRA-CURRICULAR ACTIVITIES

- Dedicated **over 80 hours** for community service under **National Service Scheme(NSS)** which involved recording audio-books and editing them using Audacity, hence providing access of literature to the blind and the illiterate
- Participated for **squash** in the in-semester camp **Prarambh** organized by the Sports Council of IIT Bombay.
- Bagged the **first** team position in '**Physics Bazinga**' competition organized by the Maths and Physics Club, IIT Bombay
- Interacted with retired law representatives from over 100 countries as a part of the '**15th International Conference of Chief Justices of the World**' organized by City Montessori School
- Participated and directed a short film for the event '**Freshiezza**' organized by the Silver Screen and IIT-BBC.