



**Himanshu Pradeep Aswani**  
**Electrical Engineering**  
**Indian Institute of Technology, Bombay**

**160110028**  
**Dual Degree (B.Tech. + M.Tech.)**  
**Gender: Male**  
**DOB: 27-05-1998**

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2021	

## SCHOLASTIC ACHIEVEMENTS

Completed a <b>Semester Exchange Program</b> at <b>National University of Singapore, Singapore</b>	2019
Pursuing a <b>Minor in Computer Science and Engineering</b>	2020
Awarded <b>A+</b> grade for exceptional academic performance in <b>Matrix Computations</b> at <b>NUS</b>	2019
Awarded <b>Branch Change</b> to Electrical Engineering based on exceptional academic performance	2017
Secured <b>98.42</b> percentile in <b>JEE Advanced</b> and <b>99.90</b> percentile in <b>JEE Main</b>	2016
Stood <b>First in High School</b> in 12th standard Maharashtra HSC board examinations with 94.00%	2016
Stood <b>First in School</b> in 10th standard ICSE board examinations with 96.60%	2014
Certified as <b>Abacus GrandMaster</b> , ranked <b>International Rank 5</b> in Level 8 held in <b>Malaysia</b>	2009

## PROFESSIONAL EXPERIENCE

**Qualcomm Software Engineer** May 2019 - July 2019

### Internship

- Conducted research on the status and techniques of Image Quality Improvement using day-to-day cameras
- Executed a number of model evaluations related to image quality improvement on the **AWS Cloud**
- Worked primarily in **TensorFlow** and **Keras** and dealt with **Deep Convolutional Neural Networks** and explored possible uses of **Generative Adversarial Networks** and **AutoEncoders** for the same

**Web Development Engineer** May 2018 - June 2018

### BSBE Department, IIT Bombay

- The project involved writing code of about 1500+ lines for an **online search database**
- Developed the **back-end** of the website in **MySQL**, **front-end** in **CSS**, **HTML** and **PHP**, hosted by **Apache**

## RESEARCH EXPERIENCE

**Functional Evolution In Neural Networks For Multi-Task Learning | M.Tech Thesis** Present

### Guide: Prof. Amit Sethi

- Explored techniques for **transferring learning** to develop multiple task capabilities in a single neural network
- Working on devising an algorithm to **guide neural network augmentation** with **function specific modules**

**Modular Neural Networks** January 2020 - June 2020

### Guide: Prof. Amit Sethi, Course: Supervised Research Exposition

### Academic Project

- Conducted an extensive literature survey that explores the notion of functional modules in neural networks
- Implemented papers that employ **spectral graph clustering techniques** to identify structural clusters

## POSITIONS OF RESPONSIBILITY

**Graduate Teaching Assistant - Advanced Topics In Machine Learning** August 2020 - December 2020

- Responsible for evaluation of assignments, resolving doubts and conducting exams for **100+** students

**Interview Coordinator, Institute Placement Team** December 2018

### Part of Core Execution Team for Campus Placements

- Coordinated with a team of **250+** members for interviews of **1600+** students
- Assisted in conducting **Pre-Placement Talks** and **Tests** for **15+** firms

## EXTRACURRICULAR ACHIEVEMENTS

Proficient in <b>PyTorch</b> , <b>TensorFlow</b> , <b>MATLAB</b> , <b>Python</b> , <b>HTML</b> , <b>Java</b> , <b>C++</b> , <b>SQL</b> , <b>PHP</b> , <b>CSS</b> , <b>L<sup>A</sup>T<sub>E</sub>X</b>	
Completed the online course <b>Introduction to Big Data</b> by <b>UC, San Diego</b>	2020
Stood <b>Second</b> in <b>Stock Pitch</b> , a virtual stock market trading competition, organised by <b>E-Cell</b>	2019
<b>Wrote</b> two course reviews to guide incoming students to the Computer Science Minor program	2018,19
Completed the online course <b>Spanish Vocabulary (Meeting People)</b> by <b>UC Davis</b>	2018
Member of <b>Gold</b> winning team in <b>Institute Football League</b> , conducted by <b>IIT Bombay Sports</b>	2018
Awarded <b>City Topper</b> in the <b>Bournvita Quiz</b> and represented the city, <b>Pune</b> , at the <b>National Level</b>	2011
Passed the International Standard of <b>Abacus Mental Arithmetic</b> Proficiency Examination	2009
Interests mainly comprise watching and playing football and reading fiction	