



Devansh Chandak
Computer Science & Engineering
Indian Institute of Technology Bombay

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UG Second Year
Male
DOB: 20/11/1999

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2020	9.88
Intermediate/+2	CBSE	Birla High School, Kolkata	2018	99.00
Matriculation	ICSE	La Martiniere For Boys, Kolkata	2016	98.67

SCHOLASTIC ACHIEVEMENTS

- Secured **All India Rank 4**, State Rank 2 in the Grade 10 **ICSE** Examination out of **250,000** students (2016)
- Achieved **All India Rank 5** in the **CBSE** Board Examinations (Grade 12) out of **1.2 million** candidates (**Overall East Zone Topper** and **All India Rank 3** in the Science Stream) (2018)
- Only student to be awarded the **Advanced Performance grade (AP)** for *extraordinary performance* in the **Computer Programming and Utilization** course out of 528 students (2019)
- Awarded **AP grade** in **Advanced Calculus** (given to the top 12 students out of 1032) and in the **Biology** course consisting of *Molecular, Physical and Biomedical modules* (top 3 students out of 502) (2018)
- Attained a Semester Performance Index (**SPI**) of **perfect 10** in the First Semester (2018)
- Among the **top 12** students to be granted **Change of Branch/Major** to Computer Science (2019)
- Offered **Computer Science** at the National University of Singapore (**NUS**) with **100 %** scholarship (2018)

SCHOLARSHIPS AND RECOGNITION

- Bagged the **Institute Academic Award**, given to the **Top 25** out of a batch of 1000+ students for *exceptional* academic performance in the first year of Undergraduate Study at IIT Bombay (2018-19)
- Bestowed with the **KVPY** (Kishore Vaigyanik Protsahan Yojna) Fellowship, given to the talented young minds in the field of Science and Technology, by Department of Science and Technology, Govt. of India (2018)
- Was felicitated by **His Excellency, The Governor of West Bengal**, with the *Mamraj Agarwal Rashtriya Puraskar* for exemplary performance in the ICSE Examinations (2016)
- Awarded the *Swami Vivekananda Scholarship* for *Undergraduate Study* by the Govt. of West Bengal (2018)
- Received a personal **Letter of Appreciation** and a cash award from Ms. Mamata Banerjee, The Chief Minister of West Bengal for *exemplary* performance in the CBSE Examinations (2018)
- Granted the *Ramawatar Gupt Pratibha Puraskar* and a cash award by **Sanmarg Foundation** for securing **99 %** in Hindi in the ICSE Board Examinations (2016)
- Felicitated with the **Times of India EduShine** for stupendous performance in the Grade 12 Board (2018)
- Recipient of the **Udbhav Poddar Memorial Prize** and the Dr. **RS Pandey Proficiency Silver Medal** for securing the **highest marks** in the country in Mathematics and Hindi respectively, in the ICSE (2016)
- Felicitated with a **Gold** medal, by Mr. S.K.Birla, industrialist & trustee of Birla High School (2018)

INTERNSHIP AND RESEARCH EXPERIENCE

Spam Email Classification — Applied Machine Learning

(April - May '19)

Guide: Dr. Vipul Arora

Indian Institute of Technology, Kanpur

- Analysis of ML Algorithms for Spam Email Classification in Python
 - Analyzed KNN, Naive Bayes, SVMs and Neural Networks and finally implemented **Naive Bayes** and **KNN** for the classification of various data sets into **spam** and **ham** using *Keras*, *Pandas*, *Numpy* and *Scikit-learn*
 - Compared accuracies for various data sets and **categorised the best method** for each data set
 - Awarded **Letter of Recommendation** for exceptional performance shown during the internship

Data Analytics Intern

(May - June '19)

Guide: Mr. Amit Ambekar (Vice President, Marketing)

Spencer's Retail Ltd.- RPSG group

- Analysis of underperforming stores given all KPIs and SKU (Stock Keeping Units) level data
 - Statistical Analysis** of transactional data at store level to understand and attribute reasons for de-growth
 - Given all the **KPIs** with respect to category, used **deep dive** into individual SKU level performance to come up with solutions to counter degrowth, in the *MGF Gurgaon Hyper* store and the *Vizag Hyper* store

Leave Application Chatbot

(Nov - Dec '18)

Guide: Mr. Mohsin Ali (Project Manager)

Citytech Software Pvt. Ltd.

- Configured and enhanced a **chatbot** for Paylite Leave Application using the **Microsoft LUIS** platform
- Helped in introducing VOICE to TEXT feature (using Bing API) from Microsoft Azure
- Research on **Human Resource Automation** and **comparative study** between *LUIS*, *Google Dialog Flow* and other developments in *Google Assistant*, *IBM Watson*, *Alexa* and *Cortana*

KEY TECHNICAL PROJECTS

Survey Management — Data Analysis and Visualisation

(Ongoing)

Guide: Prof. Amitabha Sanyal — Software Systems

IIT Bombay

- *Developing Google-like forms with extension by Conditional forms*
 - Users would be able to create completely *modular* forms, add questions with arbitrary type including *file uploads*, to be used as **quizzes** and **surveys** shareable to organisations or individuals
 - The data acquired could be analyzed by **plotting numerics**, summarizing and presenting subjective answers and *objective responses* can be used as features to **learn dependencies**
 - Involving use of Matplotlib, Database Management, Web Development and JavaScript

Screen Printing — Three Electrode System

(Jan - Apr '19)

Guide: Prof. Parag Bhargava — Materials and Technology

IIT Bombay

- Investigated *Rheological* properties of Carbon paste and analyzed *Cyclic Voltametry* for three electrode system
- Extensively made a three electrode system **cheaper** than any other in the market using carbon and silver paste

Image Reconstruction & Compression

(Aug '19)

Guide: Prof. Amitabha Sanyal — Software Systems

IIT Bombay

- Transformed **distorted** images by cleaning out noises such as *salt and pepper* noise using Numpy and Scipy
- Used *KMeans++* algorithm to flatten out coloured images across several K values to get the **Enhanced** Image

POSITIONS OF RESPONSIBILITY

Teaching Assistant

(July '19 - Nov '19)

CS 101 - Computer Programming and Utilization under Prof. Purushottam Kulkarni

IIT Bombay

- **Only sophomore** to be selected for the TA-Ship on the basis of **academic prowess** in the subject
- Involved in teaching and assisting students within and outside lab hours, with problems, conceptual doubts and other clarifications on a **one-to-one basis**

Interact Coordinator — Community Service

(2017-18)

Rotary Club of Calcutta Visionaries

Rotary International

- Coordinated **blood camps**, **health camps**, eye camps, newspaper collection drives
- **Organised sports** for *village children* in Lakshya Bagan, Sunderban, West Bengal
- Conducted free **computer classes** for *underprivileged* children of Sambhu Sadan Vidayala, Kolkata

Events Coordinator, Techfest

(Apr '19 - Jan '20)

Asia's largest Science and Technology Festival, footfall of 175,000 +

IIT Bombay

- Spearheading a team of **15+** in conceptualizing and organizing **Technoholix**, featuring performances and concerts from renowned **International** performers and DJs, and a part of the *Techfest World MUN 2020* team
- Involved in organizing **PAN India** workshops about investment education along with **NISM**, **NSE** and **SEBI** as a part of the *Financial Literacy Initiative* to promote financial literacy among the youth

TECHNICAL SKILLS

Programming Languages	C++, Python, Java, Bash, AWK, Sed, Make, CMake,
Web & App Development	Android Studio, HTML, PHP, CSS, JavaScript
Software Skills	Git, L ^A T _E X, MATLAB, MySQL, AutoCAD, Microsoft Excel

KEY COURSES UNDERTAKEN

Computer Science	Data Structures and Algorithms*, Discrete Structures*, Abstractions & Paradigms**, Data Analysis and Interpretation*, Software Systems*, Computer Programming & Utilization, Computer Networks**, Digital Logic Design**, Logic for CS**
Mathematics	Calculus, Linear Algebra, Differential Equations
Others	Quantum Physics and Application, Electricity and Magnetism, Biology, Introduction to Electrical and Electronics Circuits*, Materials and Technology ongoing, * to be completed by November 2019 ongoing, ** to be completed by April 2020

EXTRACURRICULARS

- Completed a year long training programme in *Lawn Tennis* at IIT Bombay (2018-19)
- Participated in **DanceMania** 2k19, the Inter Hostel Dance Competition at IIT Bombay (2019)
- Completed **Eight** levels of Abacus in the UCMAS Academy and won a *Merit Certificate* for Level Six (2010)
- Active player of Cricket and Table Tennis at the school level (2016-18)
- Took part in the National Science Olympiad and won a *gold* medal (2016)
- Participated in the Spanish *Guitar playing competition*, Sur-Tal (2012)