Arihant Parsoya **15D260012**
Civil Engineering **UG Third Year (B.Tech.)**
Indian Institute of Technology Bombay **Male**
DOB: 26/02/1997

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2018	8.53
Intermediate/+2	Vikas The Concept School	Vikas The Concept School	2014	92.20
Matriculation	Vikas The Concept School	Vikas The Concept School	2012	9.60

EDUCATION AND ACHIEVEMENTS

2015-Present Pursuing a **Major** in **Civil Engineering** with **Minor** in **Entrepreneurship**

2016 Awarded **Change of Branch** after first year on the basis of excellent academic performance

2013 Awarded the prestigious **KVPY** Scholarship,instituted by the IISc

WORK EXPERIENCE

Jun '17 – Aug '17 **Google Summer of Code**, Python Software Foundations.
Guide: Francesco Bonazzi & Dr. Ondrej Certik | SymPy
- Implemented Rule Based Integration(RUBI) in SymPy using pattern matching capabilities of MatchPy
- Created Mathematica to SymPy rules parser of RUBI rules
- Implemented RUBI utility functions in SymPy

June '16 – July'16 **Web Developer and Designer**, ZIPTOWN Logistics Pvt. Ltd, Mumbai.
- Created an online interface of service using YII and integrated with android application
- Developed and Designed web interface for price estimation of multiple deliveries using Google Maps API
- Added real time chat functionality to the main website

ACADEMIC AND TECHNICAL PROJECTS

Mar '17 – Apr '17 **Chat application for Sport followers**.
Prof. Anirudha Joshi | Course Project, Industrial Design Center, IIT Bombay
- Build android application to enhance conversation between people while watching sports
- Evaluated the application during football match

March '17 **Exploring 2017 UP Assembly Election Results**.
Prof. Venkatesh Rajamanickam | IDC, IIT Bombay
- Created an interactive visualization tool to analyze 2017 Uttar Pradesh(UP) elections

Jan '17 – Feb '17 **Accidents by un-natural causes in Indian States and Union Territories**.
Prof. Venkatesh Rajamanickam | IDC, IIT Bombay
- Analyzed accidents data of all states of India under different fatalities from year 2001 to 2013
- Created bubble matrix and sankey diagram to compare accidents between different states and categories across time

Jan '17 – Feb '17 **Accidents by un-natural causes in Indian States and Union Territories**.
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- Analyzed accidents data of all states of India under different fatalities from year 2001 to 2013
- Created bubble matrix and sankey diagram to compare accidents between different states and categories across time

Dec '16 **30 years of marriages in Singapore**.
Prof. Venkatesh Rajamanickam | IDC, IIT Bombay
- Analyzed marriage data of Singapore from 1984 to 2015 for people of different demographics such as age, religion and education level
- Created chord diagrams to visualize correlation between different brides and grooms of each category

Jul '16 – Nov '16 **Improving Agriculture Efficiency in India**.
Dr. Aparna Rao | Course Project, Center for Entrepreneurship, IIT Bombay
- Developed business model to improve agriculture efficiency in India using technology and economies of scale
- Validated our idea with real farmers and analyzing different scientific farming methods

Jul '16 – Dec '16	**Educational Infrastructure Data Visualization for Maharashtra**. *Prof. Venkatesh Rajamanickam	IDC, IIT Bombay* ○ Analyzed facilities data of more than 1 lack government schools in Maharashtra and developed sorting algorithms to recursively sort data based on location ○ Created tree map visualization to see aggregate facilities at different hierarchical levels
Oct '15	**Polynomials**. *Prof. Varsha Apte	Course Project, IIT Bombay* ○ Developed a C++ class to allow manipulation of unidimensional and multidimensional polynomials ○ Created plotting module capable of plotting Contour Plots of the multidimensional polynomial

POSITIONS OF RESPONSIBILITY

April '16 – May '17	**Teaching Assistant**. *Engineering Drawing	Student Support Services* ○ Responsible for teaching Engineering Drawing and AutoCAD to 60 students
April '16 – May '17	**Web Convener**. *Insight	IIT Bombay* ○ Core team member, developing new website on Django and also creating and managing new microsites to post articles and blogs. ○ Developing API and design for major websites such as IITB Senior Survey and Quibbler ○ Creating templates for websites and managing posts on the website

TECHNICAL AND COMPUTING SKILLS

Programming Languages	Python, C++, JavaScript, Java, PHP, MySQL
Frameworks	NodeJS, Django, Yii
Tools	Raspberry PI, Arduino, MATLAB, Heroku, Git
Softwares	Autodesk 3D Max, Google SketchUp, Unity, Processing
Operating Systems	MacOS, Microsoft Windows, Ubuntu

RELEVANT COURSES

Computer Science	Human Computer Interaction, Data Structures and Algorithms, Computer Programming and Utilization
Mathematics	Calculus, Linear Algebra, Differential Equations
Other	Mathematical Structures for Systems and Control, Digital Image Processing of Remotely Sensed Data, Introduction to Robotics(MIT OCW)

Extra Curricular Activities

○ Won **3rd** position in Kandy.io hackathon conducted at IIT Bombay
○ Secured **Silver** medal Vijyoshi State Level drama competition
○ Camp Attendee, National Science Camp Vijyoshi held at IISc bangalore
○ Participated in XLR8 remote controlled robot making competition
○ Participated in workshops of Embedded Systems and Economics
○ Created games as individual project on Processing and P5.js