VIKRAM KUMAR

ACADEMIC DETAILS

Year	Degree / Board	Institute	GPA / Marks(%)
---	B.Tech in Civil Engineering	Indian Institute of Technology, Delhi	6.246
2015	RBSE	Mayur Nobles Academy, Barmer	91.80%
2013	RBSE	Mayur Nobles Academy, Barmer	95.33%

SCHOLASTIC ACHIEVEMENTS

- **National Level**: AIR 2458 in JEE Advanced 2016 among around 2 lakh candidates selected in JEE Main 2016
- **State Merit List**: Awarded **Silver Medal** by RBSE for securing **14th position** in **State merit** list of *class Xth board 2013*
- **District Merit List**: Secured **3rd Rank** in District Merit List of *RBSE XIIth class examination 2015*

PROJECTS

- **Crowd Movement Modelling at Railway Infrastructures(K. Ramachandra Rao)** (May 2018 - August 2018) :
  - Formulated an Agent-Based simulation model to explain different phenomena in an evacuation scenario on Railway platforms- Used multi-agent programmable language and modeling environment ***Netlogo***
  - Formulated a python code using **SciPy** library for ***Twitter Sentiment Analysis*** on the commuters of Delhi metro and railways
  - Worked on a survey ***User perception in an Evacuation Situation*** on the commuters of Delhi Metro
  - Extracted data of pedestrians speed, flow, and density for the new and old Delhi railway station to obtain fundamental relationships between these different parameters

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- **Hydraulic Robotic Arm (P.V.M. Rao)** (Oct 2016 - Nov 2016)(*course project*) :
  - A team of five members led by a Ph.D. student worked on the project
  - Designed an **AutoCAD model** and manufactured a working model of Hydraulic Robotic Arm which functions on some of the same principles that drive real-world machines
  - The Frame was made from plywood ,6 syringes and two pieces of metal for grip ,it was light weight model and can rotate around 180 degree and had some multiple features((i.e. Adjustable height, less space consuming, easily affordable,strong and reliable) Acknowledged as a outstanding working model

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- **Deterioration of Concrete (Prof. Shashank Bishnoi)** (October 2017)(*course project*):
  - Analysed possible causes behind processes leading to ***deterioration of concrete*** *structure* in 20 different conditions
  - proposed ***reasonable and feasible*** **solutions** for recovery and prevention of these structures from damage

TECHNICAL SKILLS

- **Programming Languages** :
  Intermediate: Python, MATLAB, PHP, CSS, Bootstrap, HTML
  Basic: SQL, JavaScript, Octave
- **Softwares** : MS-Office, AutoDesk Inventor, Netlogo, phpMyAdmin
- **Online Courses**:
  - ***Introduction to Data Science in Python*** by University of Michigan on Coursera
  - ***Machine Learning*** by Stanford University on Coursera

COURSES DONE

Product Realization By Manf., Linear Algebra & Diffe. Equa., Introduction To Economics, Macro Economics, Calculus
Intro. To Computer Science, Engineering Mechanics, Mechanics Of Fluids, Elements Of Surveying, Engineering Geology, Civil Engineering Materials, Introduction To Civil Engg., Environmental Science, Soil Mechanics, Structural Analysis I, Intro. To Transportation Engg., Hydraulics

EXTRA CURRICULAR ACTIVITIES

- Completed a two days of intensive workshop on **Ethical hacking and information security**
- Worked as a **Team Head memeber** of publicity team of Rendezvous 2017
- Performed songs on the House day of Karakoram Hostel and intra hostel event