Prateek Roy

Civil Engineer (Fresher)

Address - Delhi – 110009, INDIA **Email** - royprateek96@gmail.com

Phone - 7011694100 **Date of Birth** – 28/06/1996

EDUCATION:

QUALIFICATION	INSTITUTION	CPI/%	YEAR
B. Tech: Civil Engineering	IIT Kanpur	7.2	2018
Senior Secondary (12th Grade)	Goodley Public School, Delhi - 110088	93.2%	2014
High School (10th Grade)	Goodley Public School, Delhi - 110088	10.0	2012

Scholastic Achievements

- GATE -19 Score (CE)- **675**; AIR - **1783**
- GATE -18 Score (CE)- **564**; AIR – **5400**
- JEE Advanced (2014) Category Rank - **467**

Programming Languages

- JavaScript
- Python
- C++
- MATLAB

Software

General

- Photoshop
- Animate CC
- Github/Heroku

Web Development

- Angular
- Vue
- Django
- SQL/SQLite

Projects

ATMOSPHERIC POLLUTION IN INDIA: DATA ANALYSIS AND EVALUATION

Undergraduate Project

- Collected all the available data of different pollutants in 4 major cities of India and found the annual pollution trend in each city using regression.
- Compared pollution levels across all the cities with respective meteorological parameters such as temperature, solar radiation, relative humidity and precipitation.
- Found correlation between different pollutant concentrations and meteorological parameters using co-variance analysis and commented on any significant correlation explaining or hypothesising the underlining cause.

MULTI - HEURISTIC A* ALGORITHM

Academic Project in EE698G

- Studied the variation in efficiency provided by the multi-heuristic A* algorithm compared to the single heuristic A* algorithm by providing different combinations of heuristic functions.
- The comparison was made by using the heuristics in a sliding tile puzzle and the time taken was noted against the minimum number of steps required to solve the puzzle.

WATER TRANSPORT MECHANISM

Academic Project in TA202A

- Worked in a team of five in order to make a working model of a water flow driven mechanism to lift water from a low-lying water source to elevated ground and transport through canals.
- Processes used are cutting, drilling, welding and folding of sheet metal, etc.