

# SHUBHAM KUMAR GUPTA

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## Academic Qualifications

Degree/Certificate	Institute	Year	CPI/%
M.Tech. (Geoinformatics)	Indian Institute of Technology Kanpur	2019-Present	7.29/10
B.Tech. (Computer Science & Engg.)	Madan Mohan Malaviya University of Technology	2014-2018	7.45/10
Intermediate (XII)	Divine Public School (CBSE)	2013	84.2 %
High School (X)	SDDT Intermediate College (CBSE)	2011	9.4/10

## Areas of Interest

Data Structures — Algorithms — Software Development

## Internships

- **Dashboard Design and Development for Different Products at Earth Analytics India** (Sep'20 - Present)
  - Collecting requirements and **designing database schema** for different products required at different points of time..
  - Developing a **REST API** using **NodeJS** and **ExpressJS** to satisfy the user request and to fetch data from database.
  - Designing the **front-end layout** to show **different kinds of metrics** required for different products.
  - Connecting back-end and front-end to develop a **full-fledged dashboard** with all the utility functionalities required.
- **Frontend Developer Intern at Trim-inc (Japan)** (Sep'19 - Dec'19)
  - Developed user interface for the devices used at the client side from scratch using HTML, CSS and JS.
  - Implemented various animations and built an **easy to use interface** for great user experience.

## Major Projects

- **Undergraduate Project — Exploring Facebook Page Analytics using Facebook's Graph API** (Aug'17 - Mar'18)  
Supervisor: Prof. M. K. Srivastava
  - The aim of this project was to **analyse day to day data** collected through different social networking platforms.
  - API of Facebook was used to collect **real-time data**. Data was further exposed to algorithms for analysis.
  - Used NodeJS, ExpressJS for this project to develop a **REST API** which provided data in required form after processing.
  - Different outcomes like **popularity of pages and posts, association index** etc. were observed and plotted through charts and diagrams. It also had different filter options according to different parameters for better understanding of results.

## Course Projects

- **Comparison of Various Unsupervised Machine Learning Algorithms** Guide: Prof. Salil Goel, (Sep'19 - Nov'19)
  - Learned **basics of different unsupervised machine learning algorithms** and ways to implement them.
  - Used ENVI software to **apply different algorithms on various images** by varying different parameters.
  - Different algorithms performed differently on various images however **K - Means with PCA** was most accurate.
- **Software for Imagery Reader with Different Operations** Guide: Prof. Onkar Dikshit, (Jan'20 - Mar'20)
  - Imagery file from **National Remote Sensing Agency, ISRO** along with its header file was given. Byte by byte information about the imagery and info about the header files and data structures used were provided in the given manual.
  - Wrote software to display image and perform different operations like **FCC generation** (8 bit and 24 bit), crop, resize etc.
  - Wrote software using python and its PyQt5 library. An **user interface** was generated with all the functionalities.

## Relevant Courses

Design and Analysis of Algorithms — Database Management Systems — Web Technology

## Technical Skills

- **Languages:** Proficient: C, C++, Moderate: Python 3, JavaScript HTML5, CSS3.
- **Tools/Frameworks/Runtime Environments:** NodeJS, ExpressJS, Bootstrap, L<sup>A</sup>T<sub>E</sub>X.

## Scholastic Achievements and Extra-Curricular Activities

- **5 star** coder on Hackerrank in **problem solving, C++ and Python** tracks.
- Scored **97.53 percentile** in **GATE CSE'19**
- Won goodies and T-Shirt in **Hacktober Fest** organized by digiocean for contribution to open source.
- **Top 2 percentile** in "Introduction to modern application development" course organized by **NPTEL and IIT-M**.
- **Certificate of Excellence** from VC of university for designing and developing E-Cell website.
- Participated and reached to pre-final round in E-yantra (a robotics competition) organized by **IIT - Bombay**.
- Won **first prize** in Nukkad-Natak (Street Play) in cultural fest of college.

## Positions of Responsibility

Teaching Assistant : Varun Lab — Department Website — Departmental Post Graduation Committee