

Prakhar Nagpal

Junior Undergraduate
Mathematics and Scientific Computing

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Academic Qualifications

Year	Degree/Certificate	Institute	CPI/%
2017 - Present	BS	Indian Institute of Technology, Kanpur	8.58/10
2017	CBSE(XII)	Ahlcon Public School, New Delhi	94.6%
2015	CBSE(X)	Amity International School, Noida	10/10

Scholastic Achievements

- Secured **All India Rank 2428** in **JEE Advanced 2017** among the 1.7 Lakh shortlisted candidates.
- Among the top **0.3%** of the **1.2 million** applicants in JEE Mains 2017.
- Scored **100%** in Chemistry in AISSCE Examination 2017.

Projects and Internships

- Data Science Intern, MakeMyTrip** (May'19-July'19)
Using Unsupervised Learning to Analyze and Segregate Travel Agents from Regular Users.
 - Used Libraries like **numpy**, **pandas**, and **matplotlib** to analyze and get insights on past 10 years historical data created on MakeMyTrip's Platform on booking and search data across various LOB's.
 - Carried out case studies on targeted users that dismissed common behaviour assumptions about travel agents and proposed a classification inside travel agent pool.
 - Implemented **KMeans** using **Spark's ML Library** on one-year historical Booking and Search Data Entries.
 - Used **AWS Sagemaker** Platform to implement H2O's **Isolation Forest Model** to find Travel Agents.
- Summer of Code, Department of Computer Science IIT Kanpur** (May'18- July'18)
 - Worked in team of 3 members to build a online course sharing platform(**CourseDB**) for SOC internship.
 - Used latest web technologies such as **No SQL Database**, **Javascript**, **Angular** and **firebase** for data storage.
 - Implemented **e-mail authentication** for IITK email-id holders for uploading course notes.
 - Provided features such as easy searching for courses,easy downloading of files and Disqus forum.
- Spectral Graph Theory, Association of Computing Activities IIT Kanpur**
Mentors: Raghukul Raman and Vibhor Porwal (Jan'18- Apr'18)
 - Explored and implemented **graph algorithms** like Dijkstra, Bellman Ford, Floyd Warshall and LCA.
 - Studied various graph cycles such as **Hamiltonian** and **Euler** cycles and basic group theory.

Technical Skills

- Programming Languages:** C, C++, Python, Spark, HTML, \LaTeX , SQL, Angular
- Software and Libraries:** Git, AWS Sagemaker, Microsoft Azure, Numpy, Pandas, PySpark iPython
- Operating Systems:** Windows, Linux, MacOS

Relevant Courses

Data Structure and Algorithms	Ordinary Differential Equations
Introduction to Electronics	Linear Algebra
Probability and Statistics	Fundamentals of Computing
Abstract Algebra	Introduction to Economics

Positions of Responsibility

- Senior Executive, Academic and Research Cell** (Aug'18-Mar'19)
 - Planned and conducted a two day academic fest which focused on research and industrial background.
 - Part of team for conducting Because Even Entrepreneurs Research (BeER), SRC 2019.
- Executive, Stamatics Mathematics Society IIT Kanpur** (Aug'18-Mar'19)
 - Conducted various talks taken by Professors and PhD students.
 - Hosted know your department and murder mystery game event for freshers.

Extra-Curricular Activities

- Made a News Sentiment Classification web app using Microsoft Azure Services in Microsoft **Code.Fun.Do** 2018.
- Conducted Murder Mystery Game for 300 people involving **Mathematical Logic** and **Aptitude**.
- Visited Villages for empowerment of education and promotion of government schemes as part of NSS.