CURRICULUM VITAE

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Education

07/16-present **Indian Institute of Technology (IIT) Roorkee**, Uttarakhand, India
Bachelor of Technology, *GPA: 8.24/10*

2014-2015 **Class XII, State Board**, Uttar Pradesh, India
Science Straem, *Percentage: 91.40*

2012-2013 **Class X, State Board**, Uttar Pradesh, India
Science Straem, *Percentage: 89.33*

Awards & Honors

- Merit-cum-Means scholarship from IIT Roorkee.
- Selected by MSP UP for INSPIRE Scheme *2015*.
- Best Innovative Design award from ABU.

Area of Interest Data Science, Machine Learning, Deep Learning, Natural Language Processing, Data Analytics.

Relevant Coursework Neural Networks and Deep Learning - Coursera, Sequential Modelling - AndrewNg, Machine Learning - AndrewNg, AnalyticsEdge - edX, Data Mining and Analytics - IITR, Data Structures and Algorithms - IITR, Computer Programming - IITR, Engineering Mathematics - IITR.

Work Experience

05/18-07/18 **Applying Deep Learning to Detect Affect in Text**
IBM India Pvt Ltd.

- Developed a language processing pipeline for offensive language/text detection and classification.
- OLID v1.0 dataset released by Harvard University was used for this purpose and NLTK library was used for pre-processing. Hashtag and emoji segmentation has been done for better results.
- Pretrained release of Bidirectional Encoder Representations from Transformers (BERT) and XLNet models was fine-tuned on the processed dataset which resulted in an accuracy of 82 percent approx.

11/18-12/18 **Data Science Internship**
FlyNava Technologies Pvt. Ltd.

- FlyNava Technologies is an airline innovation company which built a software product, Jupiter- "A Pricing Decision Intelligence System for clients across airline domain".
- I contributed to the development of Jupiter and developed Python programs to generate Triggers, an Automatic Alert System based on market fluctuation and irregularities, performance variation, events, competitor action and seasonality.
- MongoDB database was analyzed for trigger generation and decision-making process by integrating the database with python using PyMongo.

01/19-04/19 **Machine Learning to find critical chain length of a novel polymer** — *Minor Project*

- Developed a python program which can encode the repeating unit of a polymer into a numerical vector. This is a feature vector which represents a polymer chain mathematically.
- Developed machine learning models to map these feature vectors to the desired property of the polymer. Gradient boosted decision tree regression and multilayer neural nets are being used.
- Deployed the model using a django web application through heroku server where a user can make predictions. (https://polypredictor.herokuapp.com/)

10/19-10/19 **Analyze-This 2019**
Machine Learning Competition — American Express

- Participated in a machine learning competition based on predictive modeling and organized by American Express. The whole model was developed in Python using various module.
- Tested many machine learning algorithms like Logistic regression, KNN, SVM etc since it was a classification problem. Finally used XGBoost and got an overall accuracy of 72.4 percent for the test dataset.

04/17-04/18 **ABU Robocon 2018**
Member, Team robocon, IIT Roorkee
- The work involved in the design and fabrication of a manual bot according to the problem statement of Robocon 2018 which included gripping, vending and transferring mechanism mounted on a three-wheel Omni chassis.
- An autonomous bot was also fabricated with stabilization, transferring and throwing mechanism mounted on a four-wheel Mecanum chassis. SolidWorks was used for designing of the bots.

02/17-03/17 **Real Time Maze Solver Robot**
Srishti'17, MaRS Hobbies Club, IIT Roorkee
- Built a robotic model to solve any kind of line maze following the shortest path by using line following sensor and certain algorithms.
- It also detected the obstacles in its path using ultrasonic sensors and chose the other possible shortest path to reach the endpoint.

Technical Skills

Operating Systems: Windows, Linux.
Programming Languages: C++, Python, SQL.
Software Packages: PyCharm, Studio3T, Jupyter Notebook, Colab, SolidWorks, MS Office.
Languages Known: English (SRW), Hindi (SRW).

Positions of Responsibility and Extra Curricular

2018-present **Senior Technical Member — Team Robocon, IIT Roorkee**
- Member of Team Robocon IIT Roorkee, which participates in ABU - Robocon.

March 2018 **Mentor — Srishti'18, Hobbies Club, IIT Roorkee**
- Mentored the projects in Srishti'18 (Technical Exhibition of IIT Roorkee).

Spring 2018 **Coordinator, Event in Cognizance, IIT Roorkee**
- Appointed as the Coordinator of the event POSEIDON in which our team managed the partici -pation of two hundred applicants, taking care of logistics and match arena during Cognizance.

2016-present **Member — Cultural Council, IIT Roorkee**
- Part of Kshitij which publishes a bilinguistics magazine containing Hindi and English articles. It also organizes various literary activities on campus.

2016-2017 **Member — National Service Scheme (NSS), IIT Roorkee**
- Member of the Rastriya Aaviskar Abhiyan cell with the prime responsibility of providing technical awareness to the children of underdeveloped tribes in the vicinity of Roorkee.
- Organized various events viz. Blood Donation Camps, Technical Exhibition etc. in the local hospitals and schools respectively.

References

Seema Nagar
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IBM India Pvt. Ltd.
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Mahesh Shastry
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