Prakhar Rathi

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EDUCATION

SHIV NADAR UNIVERSITY

B.Tech in Computer Science Engineering
Expected April 2022 | Greater Noida, Uttar Pradesh
Cum. GPA: 8.98 (Current)
Dean's List Holder

MOUNT CARMEL SCHOOL, DWARKA

Grad. May 2018 | Dwarka, New Delhi
Overall: 96.6% | Computer Science: 99 | Mathematics: 97

LINKS

Github:// **prakharrathi25**
LinkedIn:// **prakharrathi25**
Kaggle:// **prakharrathi25**

COURSEWORK

CERTIFICATIONS

Python for Data Science
Deep Learning
Trading algorithms
Quantitative Trading using GCP
Flask Development
Natural Language Processing

UNDERGRADUATE

Introduction to Computer Programming
Discrete Mathematics
Digital Electronics
Java Programming
Data Mining
Probability and Statistics
Linear Algebra
Micro and Macroeconomics

SKILLS

PROGRAMMING

Proficient:
Python • Java • MySQL • HTML • CSS • C • LaTeX
Familiar
R • C++ • Spark • PHP • JavaScript

INTRODUCTION

Student of Computer Science Engineering at Shiv Nadar University looking for opportunities to grow and learn. Proficient in Python Programming and fundamentals of Machine Learning and Data Science. I am amazed by the applications of these fields and I am constantly in search of projects to apply my skills to. I have been an active public speaker, a debater and MUN enthusiast and I would like to put these skills to use.

RESEARCH EXPERIENCE

NOVEL MIXED ENCODING FOR FORECASTING PATENT GRANT DURATION Sep 2019 – Dec 2019

- Worked with Prof. Vinita Krishna, Assistant Professor, Department of General Management in the field of Intellectual Property Rights and Patent Analysis.
- Used the Indian Patent Office data on patents that have been granted between 2014 - 2019 to predict the number of days it would take to get a patent approved based on several factors.
- Accepted in IEEE Advanced Computing Conference.

DEEP LEARNING FOR POLLEN CONCENTRATION PREDICTION

Jan 2020-Present

- Pre-processed open pollen data recorded daily from 1992-present.
- Studying the factors and climatic conditions affecting Pollen concentrations of 31 species in air and their Harmful affects
- Built 5 different types of RNNs viz. Multivariate RNN, Elman Network, Jordan Network, GRU, LSTM and briefly studied their underlying mathematics.

PROJECTS

REDDIT FLAIR PREDICTOR March 2019 – Present

- Used reddit data to predict which flair(category) a subreddit would belong to by submitting the URL of the post.
- An end to end machine learning project where I performed data collection, data analysis, built and deployed a multinomial Naive Bayes Model.
- Deployed the model using Flask

STOCK MARKET TREND PREDICTOR

Aug 2019 – Sep 2019

- Used Recurrent Neural Networks and LSTM implementation to predict the trends of Alphabet Inc. closing stock prices.
- Used backpropagation and 60 day timesteps to predict the prices with a mean absolute error of 9.641.

PROVING THE ENVIRONMENTAL KUZNET'S CURVE USING WORLD BANK DATA

May 2019

- Found the relation between CO2 emissions per capita and GDP per capita in developed and underdeveloped nations
- After visualisations and analysis, I was able to prove the Environmental Kuznet's Curve using real world data.

WORK EXPERIENCE

DEBATEAROUND | Founder
June 2018 – Present | India

- Online platform to look for debates, conferences, and meetups
- Conducting workshops and helping organizers market their events.
- Started the company and received incubation under AIC, SNU

DEBATING SOCIETY | President
Jan 2019 – Jan 2020 | India

- Became an A-level adjudicator
- Semi-Finalist at Amity University Debating Tournament

ACM SNU CHAPTER | Vice - President
Jan 2020 – Present | India

- Machine Learning Study Group Lead
- Lead Organizer, ACM HackData - annual hackathon

COMMUNITY BUILDING

ARTIFICIAL INTELLIGENCE CLUB, SNU Jan, 2020 | Shiv Nadar University

- Founded a research club SNU.ai at Shiv Nadar University to promote AI Research across different disciplines.
- Mentored over 100 undergrads to learn ML and apply it to research projects within their field of interest.
- Organized talks and webinars with various AI researchers from different parts of the world.

ML SPECIAL INTEREST GROUP March, 2020 | Shiv Nadar University

- Started and led a special interest group for Machine Learning under ACM, SNU Chapter to promote peer learning and targeted skill development among students.
- Closely mentored 5 undergraduate students to learn ML and apply it to research projects within their field of interest.
- Made unique curriculum, discussed project ideas and organized mentor sessions for each student in the group.

AWARDS AND ACCOMPLISHMENTS

2020	Finalist	Smart India Hackathon for Cisco Dev NetT
2020	Recipient	Facebook Spark AR Program Scholar
2019	Recipient	Intel AI Edge Scholar
2017	Winner	Student of the Year by USA UnivQuest
2015	State Rank 1	National Science Olympiad by SOF
2015	National Finalist	World Schools Debating Championship
2014	Rank: 26/70000	Junior Science Talent Search Examination