Pratibha Bhandari(PB)

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Aim

Currently Pursuing PhD in Computational Data Science (second year) with abilities in statistics and predictive analysis, looking forward to research on data situations present in the real world. Highly organized, motivated and diligent with good communication and interpersonal abilities, trying to use the solid command on intricate mathematical ideas and programming knowledge to contribute to the growth of the institution and myself.

Education

Ph. D. (Computational Data Science) *August 2024 - present*
Indian Institute of Sciences, Bengaluru *CGPA(12 credits): 9/10*
Graph Neural Stochastic Differential Equations

MTech. Modelling and Simulation *DIAT Pune*
Master's degree program *2022-24*
***First semester** : 9.77/10, **Second semester** : 9.33/10*
***Third and fourth semester** Dissertation work* on *Forecasting of Financial Time series data possessing Stable Distribution by employing Stochastic Differential Equation*
Total cgpa: 9.5/10

M. Sc. Mathematics *D.B.S.(PG) College, Dehradun*
Master's degree program *August 2017 - June 2019*
Final cgpa: 8.33/10

B.Sc. (H) Mathematics *Graphic Era Hill University, Uttarakhand*
Bachelor's degree program *August 2014 - June 2017*
Final grade: 91%

Intermediate *Shri Guru Nanak Public School, Dehradun*
Intermediate program *May 2013 - May 2014*
Final grade: 88.6 percentile

Highschool *Shri Guru Nanak Public School, Dehradun*
Highschool program *May 2011 - May 2012*
Final grade: 89.3 percentile

Work experience

IFTM University, Moradabad *April 2021 - July 2022*
Assistant Professor in Mathematics Department of School of Sciences *Uttar Pradesh*

- Taught Undergraduates, Post Graduates and Diploma students
- Worked with Training and Placement cell (TnP)
- Was also a part of Online Education and learning Management System (OELMS) Cell.

- Subjects taught: Linear Algebra, Abstract Algebra, Mathematics for Engineers, Ordinary Differential Equation, and many more.
- Prepared graded assignments and evaluated answer scripts.

Achievements

GATE Qualified *2024*
(ST) AIR-53 GATE

GATE Qualified *2024*
(DA) AIR-1047 GATE

GATE Qualified *2022, 2023*
(MA) Applied Mathematics

Gold Medal *2024*
M.Tech.(Modelling and Simulation) *DIAT Pune*

NPTEL course on Deep Learning *July-Oct 2023*
Successfully completed the course with a valid certificate *IIT Ropar*

NPTEL course on Machine Learning *Feb-April 2023*
Successfully completed the course with a valid certificate *IIT Madras*

NPTEL course on Python for Data Science *Feb-March 2023*
Successfully completed the course with a valid certificate *IIT Madras*

NPTEL course on Basics of Real Analysis *2020*
Successfully completed the course with a valid certificate *IIT Bombay*

NPTEL course on Differential Calculus in Several Variables *2016*
Successfully completed the course with a valid certificate *IIT Kanpur*

NPTEL course on Basic calculus for Engineers, Scientist and Economists *2015*
Successfully completed the course with a valid certificate *IIT Madras*

Gold Medal *2017*
B. SC. (H) Mathematics *GEHU Uttarakhand*

Attended Workshop 0n Modelling Optimization and Simulation of Stochastic systems (MOSSS-16) *2016*
Mathematical Colloquium, Department of Mathematics *IIT Roorkee*

Project

(Second year Dissertation work) Forecasting of Financial Time series data possessing Stable Distribution by employing Stochastic Differential Equation
Lévy Induced Stochastic Differential Equation Network (LDE-Net), α-stable Lévy motion

Publication

Acceptance of paper "Forecasting of financial time series data possessing stable distributions by employing Stochastic Differential Equations: A review" for oral presentation at PuneCon2023, IEEE Pune Section International Conference, for publication in IEEE explore.

Internship

Corteva Agriscience India private Ltd.	Computer Vision task: Worked on Foundation models in CV like building custom SAM(Segment Anything Model) from the paper "Segment Anything" by Meta AI for Agricultural dataset. (Period: 29 Jan 2024 to 26 July 2024)

Technical skills

Programming Languages/Tools	C, C++, MATLAB, Python, LaTeX
Worked with Libraries	Pandas, Numpy, Matplotlib, Scikit-learn, seaborn, PyTorch

Subjects of interest

Probability and Statistics, Machine Learning, Deep Learning, Linear Algebra

Hobbies

Reading Newspaper, Playing Table Tennis and Volleyball , Cycling and Baking