Faculty Details proforma for Gargi College

(PLEASE FILL THIS IN AND Email it to gargi.college.website@gmail.com)

Title	**Mr.**	First Name	**Ramakant**	Last Name	**Prasad**	Photograph
Designation		**Associate Professor**				
Address						
Phone No Office						
Residence*		011-26494544				
Mobile*						
Email		ramakant.prasad@gargi.du.ac.in ramakant_iitd@yahoo.co.uk				
Web-Page						

Educational Qualifications		
Degree	Institution	Year
M.Sc. in Financial Mathematics	**University of Edinburgh and Heriot-Watt university, Edinburgh UK(Jointly)**	2015-16
M.Tech. in Computer Science and Data processing	**Indian Institute of Technology, Kharagpur**	2006-08
M.Sc. in Mathematics	**Indian Institute of Technology, Delhi**	2003-05
B.Sc.(H) in Mathematics	**Science College, Patna**	1999-02

Career Profile

Assistant Professor cum Junior Scientist
Rajendra Agricultural University (RAU), Pusa
19 Dec 2006 –27 Dec 2006

Software Engineer
Geometric Software Solutions, Pune
01 Sept 2008 – 27 Jan 2009

University of Delhi

Assistant Professor
Daulat Ram College
09 Nov 2009 – 07 Sept 2010

Assistant Professor
Gargi College
08 Sept 2010 –08 Nov 2014

Assistant Professor (Senior Scale)
Gargi College
09 Nov 2014 – 08 Nov 2019

Assistant Professor (Selection Grade)
Gargi College
09 Nov 2019 – 08 Nov 2022

Associate Professor
Gargi College
09 Nov 2022 – Present

Administrative Assignments

Teacher-In-Charge (2018-20)

Areas of Interest / Specialization

Financial Mathematics and Machine Learning (Python)

Subjects Taught

Functions of several variables, Complex analysis, Programming with Python, Analytics with Python, Data visualization using Python, C++, Data Structures using C++, JAVA, Machine Learning using Python, DBMS, Graph theory, Quantitative techniques in management, Inventory management, Mathematical Finance and Numerical analysis.

Recent Publications

1. Prasad, R., Kumar, K., & Dohare, R. (2023). Caputo fractional order derivative model of Zika virus transmission dynamics. *J. Math. Comput. Sci*, *28*(2), 145-157.
   (Scopus and ESCI, Q2)
2. Prasad, R., Sagar, S. K., Parveen, S., & Dohare, R. (2022). Mathematical modeling in perspective of vector-borne viral infections: a review. *Beni-Suef University Journal of Basic and Applied Sciences*, *11*(1), 102.
   (Scopus and ESCI, Q2)
3. Kumar, P., Yadav, A., Sardana, D., & Prasad, R. (2024). Extreme wave height response to climate modes and its association with tropical cyclones over the Indo-Pacific Ocean. *Ocean Engineering*, *296*, 116789.
   (SCI, Q1)
4. Khan, A. A., Kumar, V., Prasad, R., & Idrisi, M. J. (2024). SGAK: a robust ECC based authenticated key exchange protocol for smart grid networks. *IEEE Access*.
   (SCI, Q1)
5. Kumar, V., Kumar, K., Prasad, R., Almutib, K., & Hossain, M. S. (2024). SEPCVN: Secure and Efficient Protocol for Cloud Vehicular Networking. *IEEE Access*, *12*, 108657-108672.
   (SCI, Q1)
6. Kumar, V., Hassan, F., Nishad, A. K., Prasad, R., Gupta, P., Amir, M., & Ahmad, F. (2024). Design of Secure and Efficient Framework for Vehicular Digital Twin Networks Using ECC. *IEEE Access*.
   (SCI, Q1)
7. Prasad, R., Kumar, P., Singh, A., Sunil, A., Kumar, A., Patra, A., & Rajni. (2025). Trend analysis of extreme wind and wave height at key port locations along the Indian coastline. *Thalassas: An International Journal of Marine Sciences*, *41*(1), 5.
   (SCI, Q3)
8. Tiwari, H., Kumar, P., Prasad, R., Saha, K. K., Singh, A., & Cherifi, H. (2024). Bridging the climate gap: Multi-model framework with explainable decision-making for IOD and ENSO forecasting. *IEEE Transactions on Artificial Intelligence*.
   (SCI, Q1)
9. Priya, P., Kumar, P., Prasad, R., & Hisaki, Y. (2025). Assessing wave energy spectra at major Indian ports using the dual reciprocity boundary element technique. *Ocean Engineering*, *341*, 122524.
   (SCI, Q1)
10. Prasad, R., Kumar, P., Yadav, A., Singh, A., Bhaskaran, P. K., & Patra, A. (2025). Assessing CMIP6 Model Accuracy in Capturing Wind Speed Variability During Indian Ocean Dipole Events. *Pure and Applied Geophysics*, *182*(10), 4473-4501.
    (SCIE, Q2)
11. Kumar, P., Prasad, R., Saha, K. K., Singh, A., Bhaskaran, P. K., Balakrishnan, T. M., ... & Rajni. (2025). Assessing renewable energy potential: wind and wave trends along major Indian ports. *Journal of Water and Climate Change*, jwc2025091.
    (SCI, Q2)

Conference Organization/ Presentations

1. Presented a poster at NCPOR Goa entitled "Analyzing Sea Ice Variability and Dynamics in the Weddell Sea of Antarctica: A Comprehensive Study" from 16–19 May 2023.
2. Presented a paper entitled "Computational Analysis of Visakhapatnam Port with Variable Bathymetry Using SBEM" at the International Conference on Advances in Pure and Applied Mathematics, held at Shyamlal College, University of Delhi, from 8–10 February 2024.

(Priya, P., Kumar, P., Prasad, R., Om, D., & Rajni, R. (2025, April). Computational analysis of Visakhapatnam port with variable Bathymetry using SBEM. In *AIP Conference Proceedings* (Vol. 3283, No. 1, p. 040020). AIP Publishing LLC)

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3. Presented a paper entitled “Climatology and Variability of Wind Speed and SWH Along the Indian Coastal Region” at the International Conference on Pure and Applied Mathematics, held at Janki Devi Memorial College, University of Delhi, from 22–23 February 2024.
4. Presented a paper entitled “Linear Trends of Significant Wave Heights and Wind Speed Over the Arabian Sea and Bay of Bengal” at the International Conference on Advances in Mathematical Sciences, held at MGCU, Motihari (East Champaran), Bihar, from 19–20 March 2024.
5. Presented a poster at NCPOR Goa entitled “Understanding the Role of ENSO in Modulating Antarctic Sea Ice Extent” from 16–18 September 2025.

Awards and Distinctions

1. **Qualified M.Sc. (Mathematics) entrance exam in 2003 conducted by IIT Kharagpur (AIR-02), IIT Roorke (AIR-02), and IIT Delhi (AIR-10).**
2. **Qualified M.Sc. (Mathematics) entrance exam in 2003 conducted by IIT Kanpur, IIT Bombay, and Indian Statistical Institute (ISI), Bangalore.**
3. **Cleared CSIR NET-JRF in the Dec 2005 examination.**
4. **Qualified GATE-2005 with AIR-129.**
5. **Qualified GATE-2006 with AIR-007 (Percentile-99.71).**
6. **Awarded by University of Delhi Scholarship to Study MSc. Financial Mathematics at the University of Edinburgh, UK in the academic year 2015-16**

Association With Professional Bodies

Other Activities