Deepak Bhoriya

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Education

- **Ph.D. in Numerical Hyperbolic Conservation laws** 9.0 C.G.P.A. 2017-20**
  IIT-Delhi, New Delhi
  - Thesis Title: —-
- **M.Sc. Mathematics** 7.75 C.P.I. 2015-2017
  IIT-Bombay, Mumbai
- **B.Sc. Mathematics** 94.89 % 2012-2015
  Sri Venkateswara College (DU), New Delhi
- **Intermediate/+2** 86.50 % 2011-2012
  SDR Public School (CBSE), New Delhi
- **Matriculation** 9.0 C.G.P.A. 2009-2010
  Adarsh Sec. School (CBSE), New Delhi

Scholastic Achievements

- Secured **1st Rank (AIR)** in Ph.D. Entrance Exam. + Interview, South Asian University, New Delhi.
- Secured **1st Rank (AIR)** (Among 3435 students) in **M.Sc. Maths. Entrance** Exam. (Delhi University), 2015
- Secured a job (as a **STA-B-Mathematics**) in Defence Research & Development Organisation **(DRDO)**.
- Secured **AIR 39** in NET-JRF (UGC-CSIR) – 2016 (Dec).
- Secured **AIR 59** in NET (UGC-CSIR) – 2015 (Dec).
- Qualified **Gate 2017** with **AIR 280**.
- Secured **AIR 73** in **IIT-JAM Maths.** and **AIR 155** in **IIT-JAM-Stats.** 2015 (Among 7765 & 1721 Students).
- Secured **Merit rank 16 (DU)** in B.Sc. (H) Mathematics degree.
- Secured **2nd position (DU)** in B.Sc (H) Mathematics 2nd year result.
- Awarded **CBSE CSSS Scholarship** 2012-2017. [Rs.10,000 in B.Sc.; Rs.20,000 in M.Sc. (Yearly)].

Publications

- Bhoriya, D., Kumar, H., Entropy-stable schemes for relativistic hydrodynamics equations, Z. Angew. Math. Phys. (ZAMP) 71, 29 (2020). https://doi.org/10.1007/s00033-020-1250-8
- —-...

Teaching Assistantship

- Teaching assistant for courses Calculus (twice) and Linear Algebra for B-Tech. 1^{st} year.
- Real Analysis for M.Sc. 1^{st} year.

Research Visits

- **University of Notre Dame, USA** 2^{nd}August – 2^{nd}December, 2019
  - Collaborative work with Prof. Dinshaw S. Balsara for a duration of 4 months.
  - Worked on "Multidimensional HLLI Generalized Riemann Problem Solver for Conservation Laws – The Two-Dimensional Case for Structured Meshes".
- **TIFR Centre For Applicable Mathematics, Bangalore, India** 2^{nd}July – 9^{th}July, 2018
  - Discussion with Prof. Praveen Chandrashekar, Prof. Dinshaw S. Balsara, and Prof. Harish Kumar for a duration of 7 days.
  - Worked on "Various open research problems in Hyperbolic conservation laws and Astrophysics".

Programs/Internships

- **AIS Differential-Equations (2018),** 28-days June – July, 2018
  University of Hyderabad, Hyderabad.
- **Computational Solution of Hyperbolic PDEs for Scientists, Engineers, and Mathematicians,** 12-days December, 2017
  IIT-Delhi, New Delhi.
- **SPIM (Summer Programme In Mathematics),** 28-days June – July, 2016
  Harish-Chandra Research Institute (HRI), Allahabad.
- **MTTS (Mathematics Training and Talent Search),** 28-days June – July, 2014
  IIT-Guwahati, Assam.

Technical Skills

Scientific Programming Languages: Fortran | C | C++ | Python | Matlab
Parallel Computing Libraries: PETSc | OpenMP
Libraries & Graphical Frameworks : Gnuplot | VisIt | Matplotlib | Numpy | Pandas | Scikit-learn
Web Designing: Basic HTML