Chinmay Patwardhan

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Personal information

Date of birth February 06, 1999
Nationality Indian

Academic Career and Education

Doctoral studies

2023–Now Doctoral researcher at the Collaborative Research Centre (CRC)-1173 Wave Phenomenon at Karlsruhe Institute of Technology, Germany

Master studies in Mathematics

2020–2022 Master at Karlsruhe Institute of Technology • Study Focus: Applied and Computational Mathematics - Numerical Analysis - Optimisation • Final grade: 1.8
• Master thesis: "Adaptive Dynamical Low-Rank Approximation for Radiation transport"

Bachelor studies in Mathematics

2016–2019 Bachelor at Ramnarain Ruia Autonomous College, Mumbai, India • Final grade: 9.91 (Highest grade: 10.0)

Grade 12 Examination

2009–2016 12th Grade Exam at Kendriya Vidyalaya I.I.T. Powai, India • Final percentage: 86.7%

Work experience

03,2022 - 08,2022 Student research assistant (HiWi) at Steinbuch Centre for Computing (KIT), Karlsruhe, Germany • Development of numerical methods - Dynamical low-rank integrators

06,2021 - 03,2022 Student research assistant (HiWi) at Collaborative Research Center 1173 (KIT), Karlsruhe, Germany • Parallel programming - Uncertainty quantification - Sparse grid tools

02,2021 - 11,2021 Student research assistant (HiWi) at Steinbuch Centre for Computing (KIT), Karlsruhe, Germany • Automatic meshing - Image countouring - Mesh optimisation

Awards and honours

2019 The Principal B. Y. Oak Mathematics Prize for highest grade in Bachelors
2019 The Late Prof. Chandrashekhar Paritoshik for highest grade in Bachelors
2019 The Late Mrs Sushama Purushottam Dandekar Prize for highest grade in Bachelors
2019 The Sudha Joshi Ghanekar Mathematics Scholorship for highest grade in Bachelors

2016 Best student award in senior secondary school

2014 Certificate of merit and cash prize, from the Central Board for Secondary Education (CBSE), Govt. of India, for receiving high grades in 10th grade examination.

Volunteering and Outreach

2023 - Now Supervision of mathematical modeling projects for high school and university students during CAMMP weeks

Conferences and workshops

September 2023 MathSEE Symposium 2023, Poster • Asymptotic preserving dynamical low-rank approximation for gray thermal radiative transfer equations

May 2023 Dynamical low-rank approximation: New Horizons 2023 workshop, Participation

April 2023 Moment Methods in Kinetic Theory (MMKT) 2023, Poster • Dynamical low-rank approximation with step-size control for radiation transport

May 2019 Mathematics training and Talent Search (MTTS) 2019, Participant Level 1 • MTTS is a training program for select group of mathematics students in their Bachelor studies from across India

May 2018 Mathematics training and Talent Search (MTTS) 2018, Participant Level 0 • MTTS is a training program for select group of mathematics students in their Bachelor studies from across India

Previous and current collaboration partners

- Martin Frank, Pia Stammer, Emil Løvbeck, Sebastian Krumscheid (Karlsruhe Institute of Technology, Germany)
- Jonas Kusch (University of Innsbruck, Austria)
- Amiya R. Bhowmick (Institute of Chemical Technology, India)

Publication Links

- ResearchGate: https://www.researchgate.net/profile/Chinmay-Patwardhan

Preprints

Journal Articles

[Pan+21] Vidushi Pant, Chinmay Patwardhan, Kshitij Patil, Amiya Ranjan Bhowmick, Abhishek Mukherjee, and Achyut Kumar Banerjee. "ILORA: A database of alien vascular flora of India". In: *Ecological Solutions and Evidence* 2.4 (2021), e312105. DOI: https://doi.org/10.1002/2688-8319.12105.

[Ban+21] Achyut Kumar Banerjee, Anzar Ahmad Khuroo, Katharina Dehnen-Schmutz, Vidushi Pant, Chinmay Patwardhan, Amiya Ranjan Bhowmick, and Abhishek Mukherjee. "An integrated policy framework and plan of action to prevent and control plant invasions in India". In: *Environmental Science & Policy* 124 (2021), pp. 64–72. ISSN: 1462-9011. DOI: https://doi.org/10.1016/j.envsci.2021.06.003.

Programming Skills

- Languages: Julia, Python, LaTeX
- Frameworks: Git, Linux, MS-office

Languages

English (native/C2) • Marathi (native) • Hindi (native) • German (A1.1)

Further education and courses