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https://iyer-karthik.github.io/

Education

University of Washington

Ph.D. Mathematics

Tata Institute of Fundamental Research

M.Sc. Mathematics

University of Mumbai

B.Sc. Mathematics

Seattle, WA

September '12 - June '18 (expected)

Bangalore, India August '10 - May '12

Mumbai, India

July '07 - May '10

Work Experience

Hong Kong University of Science and Technology

Hong Kong

Junior Visiting Scholar at Jockey Club, IAS

 $September ext{-}December$ '16

- Research on uniqueness for inverse problems in elliptic partial differential equations. Specific emphasis on very low regularity and degeneracy of coefficients.

University of Washington

Seattle, WA

Research assistant under Prof. Gunther Uhlmann

June-August '15, March-August '16

- Research on inverse problems in partial differential equations.

University of Washington

Seattle, WA

Instructor

Summer '14, Fall '15

- Taught basic and advanced multi-variable calculus to classes comprising of college freshmen and juniors.
- Prepared class sessions to help students grasp course content and documented students'
 attendance, participation, and academic progress by giving and grading assignments,
 projects, quizzes and examinations.

Teaching assistant

(Fall: '12, '13, '14; Winter: '13, '14, '15, '16; Spring: '13, '14, '15; Summer '13, '17)

- Led quiz sections for calculus or pre-calculus freshmen courses. Responsibilities included demonstration of problem solving techniques, grading exams and holding regular office hours.
- Grader for senior level math classes on Mathematical Analysis and Geometry. Primary responsibilities involved grading weekly assignments and holding regular problem solving sessions.

Research Papers

- Determining rough first order perturbations of the polyharmonic operator.

 Joint work with Yernat Assylbekov
- Cloaking for a quasi-linear elliptic partial differential equation.

 Joint work with Tuhin Ghosh

Awards and Honors

- Full Scholarship (August '10 May '12) along with annual contingency grant by Tata Institute of Fundamental Research, Bangalore.
- Top 2% among the graduating class of '10, University of Mumbai.
- Top 16 finisher at the inaugural Madhava Mathematics Competition organised under the aegis of National Board of Higher Mathematics, India.

Skills

• Technical: Python, R, C++, MATLAB, LATEX, SQL, git.