karthik2@math.washington.edu

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

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 - May '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 - December '16

 Research on uniqueness in inverse problems for low regularity of coefficients for elliptic partial differential equations..

University of Washington

Seattle, WA

Research assistant, Instructor, Teaching assistant

September '12 - present

- Research assistant under Prof. Gunther Uhlmann working on inverse problems in partial differential equations.
- Instructor for basic and advanced multi-variable calculus. Taught the course content, gave and graded assignments, quizzes and examinations.
- Teaching assistant for undergraduate mathematics courses. Led quiz sections for calculus and pre-calculus courses and graded senior level math classes.

Submitted 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. (To appear in Inverse Problems and Imaging.)

Awards and Honors

- Full Scholarship (August '10 May '12) by Tata Institute of Fundamental Research, Bangalore.
- Top 1.5% among the graduating class of '10 of over 1000 students at University of Mumbai.
- Top 16 finisher at the 2010 Madhava Mathematics Competition, a mathematics competition for college undergraduates in India organized under the aegis of National Board of Higher Mathematics.

Skills

- **Technical:** Python, R, C++, MATLAB, LATEX, SQL, git.
- Selected Coursework: Stochastic Calculus, Monte Carlo simulation, Linear Algebra, Probability, Numerical Partial Differential Equations; (Ongoing) Statistical Inference, Machine Learning.