Karthik Iyer

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

Education

- **University of Washington** Seattle, WA
  Ph.D. Mathematics *September '12 - May '18 (expected)*
- **Tata Institute of Fundamental Research** Bangalore, India
  M.Sc. Mathematics *August '10 - May '12*
- **University of Mumbai** Mumbai, India
  B.Sc. Mathematics *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.