# 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 - June '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 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, 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 math 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 inaugural Madhava Mathematics Competition, a mathematics competition for undergraduate students organized under the aegis of National Board of Higher Mathematics, India.

## Skills

- **Technical:** Python, R, C++, MATLAB, LaTeX, SQL, git.
- **Selected Coursework:** Stochastic Calculus, Monte Carlo simulation, Linear Algebra, Probability and Statistics, Numerical Partial Differential Equations, Introduction to Trading Systems.