Saumya Sinha **Curriculum Vitae**

CONTACT INFORMATION

DCH-2038, Rice University,
Houston, TX - 77005

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INTERESTS

Optimization under uncertainty, applications in operations research, stochastic and dynamic programming.

EDUCATION

PhD, Applied Mathematics (minor in Advanced Data Science)
University of Washington, Seattle, WA, USA August 2018
Dissertation: Robust dynamic optimization: theory and applications
Advisor: Archis Ghate

MS, Applied Mathematics
University of Washington, Seattle, WA, USA March 2015

MS, Mathematics
TIFR Centre for Applicable Mathematics, Bangalore, India July 2013

BS (Honors), Mathematics
St. Stephen's College, University of Delhi, India June 2011

WORK EXPERIENCE

Postdoctoral Research Associate, Rice University, Houston.
Working with Prof. Andrew Schaefer on stochastic optimization with focus on healthcare applications. October, 2018 - present

Instructor, University of Washington, Seattle.
Taught 300-level undergraduate courses in numerical linear algebra and differential equations for the Applied Math department Sp & Su 2017, Sp & Su 2018

Graduate mentor, University of Washington, Seattle.
Supervised an undergraduate student in a reading course for the Women in Applied Math Mentorship Program Spring 2018
Topic: Choice modeling and its application to airline network management

Teaching assistant, University of Washington, Seattle.
Courses in data analysis, mathematical modeling and numerical analysis among others Sep 2013 - Dec 2017, multiple terms.

PUBLICATIONS

- Robust response-guided dosing (**S. Sinha**, J. Kotas, A. Ghate) *Operations Research Letters*, Vol 44(3), 394-399, 2016.
- Policy iteration for robust nonstationary Markov decision processes (**S. Sinha**, A. Ghate.) *Optimization Letters*, Vol 10(8), 1613-1628, 2016.
- Approximate policy iteration for robust countable-state Markov decision processes (**S. Sinha**, A. Ghate) *In preparation.*
- A robust multi-period newsvendor model with inventory balance constraints (**S. Sinha**, M.R. Wagner, A. Ghate.) *In preparation.*

AWARDS AND FELLOWSHIPS

- INFORMS Doctoral Student Colloquium (2017)
- William and Marilyn Conner Endowed Fellowship (Spring, 2014)
- INSPIRE Scholarship, Government of India. (2008)
- National Talent Search Scholarship, NCERT, India. (2006)