Saumya Sinha   Curriculum Vitae

CONTACT INFORMATION	University of Washington Department of Applied Mathematics Lewis Hall, Box 353925 Seattle, WA - 98105	Email: saumya@uw.edu Website: saumya-sinha.github.io LinkedIn: linkedin.com/in/sinhasaumya

INTERESTS

Optimization under uncertainty, data-driven optimization, applications in operations research, dynamic programming.

EDUCATION

PhD, Applied Mathematics (Minor in Advanced Data Science)
University of Washington, Seattle, WA, USA.   Sep, 2013 - Aug, 2018 (expected).
Advisor: Archis Ghate

MS, Applied Mathematics
University of Washington, Seattle, WA, USA.   March, 2015. *GPA*: 3.85/4.0

MS, Mathematics
Tata Institute of Fundamental Research, Centre for Applicable Mathematics,
Bangalore, India.   July, 2013. *Grade*: 83.05%

BS (Honors), Mathematics
St. Stephen's College, University of Delhi, India.   June, 2011. *Grade*: 81.75%

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) *Under revision, available upon request.*

– Robust multi-period newsvendor with inventory balance constraints (**S. Sinha**, M.R. Wagner, A. Ghate.) *In preparation.*

– Robust countable-state MDPs with unbounded costs (**S. Sinha**, A. Ghate.) *In preparation.*

WORK EXPERIENCE

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

Graduate mentor, University of Washington, Seattle.
Will supervise an undergraduate student in a one-quarter reading course for the Women in Applied Math Mentorship Program (Spring 2018).

Teaching assistant, University of Washington, Seattle.
Courses in data analysis, mathematical modeling and numerical analysis among others (multiple quarters since Autumn 2013).

SELECTED COURSEWORK

- Optimization in System Sciences   - Machine Learning
- Mathematical Programming   - Computational Methods for Data Analysis
- Network Optimization   - Probability & Statistics
- Integer Programming   - Econometrics

TECHNICAL SKILLS

Proficient with MATLAB, Python and R.
Familiar with AMPL, CPLEX, SQL, MS Excel, Mathematica.