Soumyarup Sadhukhan

Curriculum Vitae

General Information

Address:	Uttarpara Housing Estate 88B G.T. Road Flat No 3C/19, Bhadrakali, Hooghly-712232, West Bengal
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DOB:	15th November, 1991
Nationality:	Indian
Category:	OBC NCL

Academic Positions

(Dec) 2021– Present	**Assistant Professor Grade II**, Department of Mathematics and Statistics, IIT Kanpur.
(Apr) 2021– (Nov) 2021	**CV Raman Post Doc**, Department of Computer Science and Automation, IISc Bangalore, Mentored by Professor Yadati Narahari.
(Jan) 2021– (Mar) 2021	**Visiting Scientist**, Indian Statistical Institute, Kolkata, Applied Statistics Unit, Associated with Professor Mridul Nandi.
(Oct) 2020– (Dec) 2020	**Research Associate**, Indira Gandhi Institute of Development Research, Mumbai, under Professor Rupayan Pal,.

Education

2015–2020 (August)	**Ph.D. in Quantitative Economics**, *Indian Statistical Institute*, Kolkata. Thesis title: Essays on Random Social Choice Theory; Supervisor: Souvik Roy.
2014–2015	**Joined as a JRF in Statistics**, *Indian Statistical Institute*, Kolkata.
2012–2014	**Master of Statistics**, *Indian Statistical Institute*, Kolkata, Marks - 76.55%, Division - First (Distinction).
2009–2012	**Bachelor of Science in Statistics**, *Ramakrishna Mission Residential College, Narendrapur*, Kolkata, Marks - 85%, Division - First.
2009	**Higher Secondary**, *West Bengal Council of Higher Secondary Education*, Marks - 85%, Division - First.
2007	**Secondary**, *West Bengal Board of Secondary Education*, Marks - 88.5%, Division - First.

PhD Course Work

Course Name	Marks
Measure Theoretic Probability	98
Metric Topology and Complex Analysis	88
Time Series Analysis	89
Statistical Computing	75
Game Theory 2	90

Research Interests

Topics Game Theory, Choice Theory, Mechanism Design, Decision Theory, and Stochastic Games

Publications

Journal Articles

1. *"An extreme point characterization of strategy-proof and unanimous probabilistic rules over binary restricted domains",* with Hans Peters, Souvik Roy and Ton Storcken, **Journal of Mathematical Economics**, 2017, 69, 84-90.
   https://doi.org/10.1016/j.jmateco.2017.01.003

2. *"A characterization of random min-max domains and its applications",* with Souvik Roy, **Economic Theory**, 2019, 68, 887-906.
   https://doi.org/10.1007/s00199-018-1149-1

3. *"A unified characterization of randomized strategy-proof rules"* with Souvik Roy, **Journal of Economic Theory**, 2020

4. *"Unanimous and strategy-proof probabilistic rules for single-peaked preference profiles on graphs"* with Hans Peters and Souvik Roy, **Mathematics of Operations Research**, 2021.

Edited Book Chapters

1. *"Formation of committees through random voting rules",* with Souvik Roy and Arunava Sen, **W. Trockel (ed.) Social Design. Essays in Memory of Leonid Hurwicz.**, 2019, 219-231.

Survey Articles

1. *"Recent Results on Strategy-proofness of Random Social Choice Functions",* with Souvik Roy and Arunava Sen, **Proceedings of International Conference on Game Theory and Networks** (Forthcoming).

Ongoing Research

Submitted Papers

1. *"On the structure of strategy-proof division rules"* with Souvik Roy.

2. *"On the equivalence of strategy-proofness and upper contour strategy-proofness for randomized social choice functions"* with Souvik Roy.

3. *"Formation of committees under constraints through random voting rules"* with Souvik Roy (Revision requested from Journal of Economic Theory).

4. *"Restricted probabilistic fixed ballot rules and hybrid domains"* with Shurojit Chatterji, Souvik Roy, Arunava Sen and Huaxia Zeng.

Working Papers (drafts available)

1. *"Fair division with multi-plateaued preference"* with Hans Peters and Souvik Roy.

2. *"Strategy-proof and unanimous random rules on partially single-peaked domains"* with Souvik Roy.

Work in Progress

1. *"Random rules when agents have Euclidean preferences"* with Souvik Roy.

Professional Activities

Referee

Games and Economic Behaviour.

Conference Presentations

2019 **The 15th Annual Conference in Economic Growth and Development**, *ISI Delhi (December)*.

2019 **The 7th Summer School of Econometric Society 2019**, *Faculty of Economics and Business, Hokkaido University, Sapporo, Japan (August)*.

2018 **Winter School 2018**, *Delhi School of Economics (December)*.

2018 **The 14th Annual Conference in Economic Growth and Development**, *ISI Delhi (December)*.

2018 **International Workshop on Game Theory and Networks**, *Dibrugarh University (September)*.

2018 **The 14th Meeting of the Society for Social Choice and Welfare**, *Seoul Nationanl University, South Korea (June)*.

2017 **Winter School 2017**, *Delhi School of Economics (December)*.

2017 **The 13th Annual Conference in Economic Growth and Development**, *ISI Delhi (December)*.

2016 **Winter School 2016**, *Delhi School of Economics (December)*.

2016 **The 12th Annual Conference in Economic Growth and Development**, *ISI Delhi (December)*.

2016 **The 13th Meeting of the Society for Social Choice and Welfare**, *Lund University, Sweden (June 28-July 1)*.

2016 **International Conclave on Foundations of Decisions and Game Theory**, *IGIDR, Mumbai (March)*.

2015 **The 11th Annual Conference in Economic Growth and Development**, *ISI Delhi (December)*.

2015 **Second Annual ISIK-IGIDR Research Scholar Meet**, *ISI Kolkata (March)*.

Teaching Assistant

2017 **Teaching Assistant for the course "The Theory of Mechanism Design", Indian Statistical Institute, Kolkata (January - May)**.

Workshop Organizing Committee

2015 **Workshop on Game Theory and Mechanism Design, Indian Statistical Institute, Kolkata (March)**, *Member - Student Organizing Committee*.

References

Souvik Roy (Thesis Supervisor)
Economic Research Unit
Indian Statistical Institute
Kolkata, India
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Arunava Sen
Economics and Planning Unit
Indian Statistical Institute
Delhi, India
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School of Business and Economics
Maastricht University, Netherlands
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Indian Statistical Institute
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Surajit Borkotokey
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