

## Candidate Profile at a Glance – Swaprava Nath

<b>Current Affiliation</b>	Fulbright-Nehru Postdoctoral Fellow Carnegie Mellon University, 2015 – till date
<b>Previous Affiliations</b>	Lecturer and Post-Doc, Indian Statistical Institute, New Delhi, 2013 – 2015 PhD Candidate, Computer Science and Automation, Indian Institute of Science, Bangalore, 2009 – 2013
<b>PhD Thesis Title</b>	Mechanism Design for Strategic Crowdsourcing
<b>Research Interests</b>	Artificial intelligence, multi agent systems, game theory, mechanism design, computational social choice, crowdsourcing
<b>Publication Profile</b>	Journals: 4 (ACM TEAC, ACM TOSN, Rev of Econ Des, Econ Letters) Peer-reviewed Conferences: 10 (AAMAS, IJCAI, AAI, WINE, WWW) Working papers: 3 <b>Total citations: 77, h-index: 5</b> (source: Google Scholar)
<b>Research Abstract</b>	My research lies in the intersection of microeconomics and computer science. In particular, I work on the theory and applications of mechanism design that actively involve computational science as a tool of analysis and the Internet as a method of implementation. My research has two complementary themes: one provides solutions to combat the strategic behavior of the multiple rational and intelligent agents or systems in these applications, and the other theme uses artificial intelligence to assist humans take provably efficient decisions. We model the strategic behavior using a game theoretic framework and provide mechanism design solutions that are provably efficient and stable. On the other hand, we use a computational framework to analyze the performance of the system quantitatively. The connection between these two analysis techniques gives rise to many interesting questions and elegant solutions in the versatile domain of multi-agent systems.
<b>Research Collaborators</b>	<i>Y. Narahari</i> (PhD thesis advisor, IISc Bangalore), <i>Onno Zoeter</i> (Former researcher at Xerox Research), <i>Arunava Sen</i> (Professor, Indian Statistical Institute, New Delhi), <i>Ariel Procaccia</i> (Assistant Professor, Carnegie Mellon University), <i>Tuomas Sandholm</i> (Professor, Carnegie Mellon University)
<b>Awards and Achievements</b>	<i>Fulbright-Nehru Postdoctoral Fellowship</i> , 2015 – 17 <i>Honorable Mention in Yahoo! Key Scientific Challenges Program</i> , 2012 <i>Intern Day Prize</i> , 2010, at Xerox Research Centre Europe, France <i>Tata Consultancy Services PhD Fellowship</i> , 2010 GATE 2006: <i>All India Rank 34</i> (stream: EC) Rank in Undergraduate University: 2 ( <i>Bronze medal</i> ) WBJEE 2002: <i>State Level Rank 25 (Engineering)</i> 10+2 School Leaving Exam: <i>State Level Rank 28</i>
<b>Teaching Experience</b>	1 full (title: <i>Scientific Computing using Python</i> ) and 1 co-taught (title: <i>Mathematical Programming with Applications to Economics</i> ) courses at Indian Statistical Institute, New Delhi, 2014 Teaching assistant for 7 courses at Indian Institute of Science, Bangalore, 2010 - 13
<b>Student Advising</b>	1 Masters student and 1 summer intern at Indian Statistical Institute, New Delhi, 2015
<b>Internships</b>	Harvard School of Engineering and Applied Sciences, Fall 2011 Xerox Research Centre Europe, France, Summer 2010
<b>Reviewing Service</b>	IJCAI 2016, COMSOC 2016, WINE 2012, 2015, Math Soc. Sci. 2015
<b>Industry Experience</b>	Software engineer in Cisco Systems (India) Private Limited, 2008 - 09

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