Soumyakant Padhee (Soum)

CONTACT INFORMATION

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EDUCATION

Northeastern University
Ph.D. Candidate, Industrial Engineering **(expected July 2023)**

Dissertation Topic: Dynamics of Innovation in Eng. design teams: Complex Network Approach.
Committee: Babak Heydari (Advisor), Samina Karim, Yingzi Lin, Tucker Marion

University of Wisconsin-Madison **May 2019**
M.S. (Business, Operations Management)

RWTH Aachen University, Germany - **Mar. 2015**
M.S. (Production Systems Engg.)

Veer Surendra Sai University of Technology (UCE), India **May 2010**
Bachelor of Technology (Manufacturing Sc.)

RESEARCH INTERESTS

Modeling Socio-Technical Systems, Innovation, Organizational Design, Systems Engineering, Computational Social Science, Game Theory, Business Analytics, Supply Chain & Operations Management.

HONORS AND AWARDS

College of Engineering Graduate Teaching Award 2022
Dept. of Mechanical & Industrial Engg. Engineering-as-Art Award 2021
Henry C. Naiman Outstanding Graduate Student Teaching Award, Wisconsin School of Business 2018
School of Business Scholarship, University of Wisconsin-Madison 2016–2019
Best of Class Scholarship & named in Dean's list for outstanding academic achievement, RWTH Aachen University 2015

CONFERENCE PAPER PRESENTATIONS

Strategic Management Society (SMS) 42nd Annual Conference in London (September 2022)- "Core or Periphery: Where Should Firms Locate Exploring Innovators? Exploring With an NK Model" with B. Heydari, S. Chattopadhyay, **S. Padhee**, S. Karim. *(peer-reviewed oral presentation. acceptance < 15-20%)*

The Council of Engineering Systems Universities (CESUN) at Eighth International Engineering Systems Symposium, Charlottesville. (October 2021) -"Innovation Flow in Engineering System Design Teams: Core and Periphery and the Role of Complexity". *(peer-reviewed oral presentation. acceptance < 20-25%)*

Institute for Operations Research and the Management Sciences (INFORMS) Annual Meeting, Virtual. (November 2020) -"Evolution of Innovation Networks at Different Stages of Technology Life cycle".

PAPERS & PUBLICATIONS

B. Heydari, S. Chattopadhyay, **S. Padhee**, S. Karim. *Core or Periphery: Examining where to allocate exploring inventors and the impact on breakthrough innovation.* (under review at Management Science)

Paper Publications Cont.

S. Padhee, N. Lore, B. Heydari. *Evolution of Design Teams throughout Industry Life Cycle: Interplay of Innovation and Complexity.* (under review at Systems Engineering Journal, Wiley)

S. Padhee, B. Heydari. *Identifying Evolution of Innovation Networks at Different Stages of Technology Life Cycle: Evidence from Patent-Citation Networks.* (submitted at Journal of Engineering Design)

B. Heydari, Y. Bart, D.T. O' Brain, **S. Padhee**. *Short-term Rentals Improve Locals´ Experience of Neighborhood Eateries Evidence from the impact of Airbnb on Restaurants Quality in Boston.* (preparing Draft Manuscript for submission)

S. Padhee, S. Pani, S.S. Mahapatra (2012). *Parametric Study on laser drilling of Al/SiCp metal matrix composite*, Proceedings of Institution of Mechanical Engineers, Journal of Engineering manufacture March, Vol 226, Issue 1,2012.

S. Padhee, N. Nayak, S. Panda, P. Dhal, S.S. Mahapatra (2012). *Multi-objective Parametric Optimization of Powder Mixed Electro-discharge Machining using Response Surface Methodology and Non- Sorted Genetic Algorithm*, Sadhana - Journal of Indian Academy Of Science, Vol.37, Part 2.

G.S. Beriha, B. Patnaik, S.S. Mahapatra, **S. Padhee** (2012).*Assessment of safety performance in Indian industries using fuzzy approach*, Expert System with applications, Vol 39, Issue 3,2012.

H.B. Sahu, **S. Padhee**, S. Pani, S.S. Mahapatra (2011).*Prediction of spontaneous heating susceptibility of Indian coals using fuzzy logic and artificial neural network model*, Expert System with Applications, Vol 38, Issue 3,2011.

S. Panda, **S. Padhee**, A. K. Sood, S.S. Mahapatra (2009).*Optimization of Fused Deposition Modeling (FDM) Process Parameters Using Bacterial Foraging Technique*, Intelligent Information Management, Vol 1, No. 2.

Teaching Experience

Northeastern University.

Teaching Assistant (Fall-Spring), Economic Decision Making	2021–2023
Teaching Assistant (Spring), Platforms and Sharing Economics	2019–2020
Teaching Assistant (Fall), Economic Decision Making	2019–2020

Wisconsin School of Business.

Teaching Assistant (Fall-Spring), Business Analytics II 2016–2019
1600 students(total), 5 sections
Avg. teaching evaluation 4.28, 4.58, 4.20/5
Distinguished Teaching Award, 2017, 2018 & 2019

Professional Experience

Research Assistant, (Hardware-in-Loop ECU Testing for Daimler Truck AG) 2015
FEV GmbH, Aachen, Germany

Research Assistant 2014–2015
Fraunhofer-Gesellschaft, Aachen, Germany.

Assistant Manager (Vendor Development & Process Quality) 2012–2013
New Engines & Power Trains CVBU, Tatanagar, Tata Motors, India.

Assistant Manager (Head Manufacturing's Office) 2010–2012
Production Planning Projects & Assembly Line Optimization
Commercial Vehicle Business Unit, Tatanagar, Tata Motors, India

Certifications	**Six Sigma Black Belt Certification**, American Society of Quality, USA
Languages	**English** (Fluent), **Hindi** (Native), **Odia** (Native), **German** (Working Proficiency)
Technical Skills	R, Python, LaTeX, MATLAB, Otree, Gurobi
Modeling Skills and Interests	Agent-based Simulations, Stochastic Processes, Econometric Models, Bayesian Statistics, Large Scale Optimization, Deep learning, Reinforcement learning
Selected Graduate Coursework	Micro-Economics Series, Game Theory, Econometric Theory, Industrial Organization Theory, Risk Analysis & Decision Science, Stochastic Modelling Techniques, Optimization Series (Linear, Non-linear, Integer, Dynamic, Network), Machine Learning, Supply Chain & Inventory Control, Experimental Game Designing, Network & Graph Theory.

References

Babak Heydari (Advisor)
Associate Professor, Mech. & Industrial Engg.
MAGICS Lab & Network Science Institute
Northeastern University
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Associate Professor of Marketing
D'Amore-McKim School of Business
Northeastern University
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