SHUVABRATA CHAKRABORTY

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Education

Doctorate: Doctor of Philosophy (Ph.D.)

Institute: Indian Institute of Management (IIM) Lucknow

Duration: June 2016 – December 2020

Dissertation Title: A study of valid inequalities and a Lagrangian approach for the

Team Orienteering Problem with non-identical agents

Thesis Supervisor: Prof. Yogesh K. Agarwal

• Studied a more generalized version of a classical routing problem using an integer programming model and explored solution methodologies based on cutting planes and Lagrangian relaxation.

• Completed 2-years doctoral course-work in April 2018 with an overall CGPA of 8.04/10.00

Graduation: Bachelor of Technology (B. Tech.) in Mechanical Engineering

Institute: National Institute of Technology (NIT) Silchar

Duration: 2007 - 2011 Performance: 9.61/10.00

Higher Secondary: All India Senior School Certificate Examination (AISSCE), 2007

Institute: Kendriya Vidyalaya Khanapara, Guwahati, Assam Board: Central Board of Secondary Education (CBSE)

Performance: First Division, 84.4% (90.33% Major)

Secondary: High School Leaving Certificate Examination (HSLC), 2005

Institute: Silchar Collegiate School, Silchar, Assam
Board: Board of Secondary Education, Assam (SEBA)

Performance: First Division (Distinction), 85.00%

Professional Experience

Organization: Indian Institute of Management (IIM) Amritsar

Location: Amritsar, Punjab, India

Department: Quantitative Methods & Operations Management

Designation: Assistant Professor
Duration: (MM/YYYY) 01/2021 to Present

Organization: Engineers India Limited (EIL) - A Navratna Company

Location: New Delhi, India

Department: Piping, Engineering Division

Designation: Management Trainee Engineer Senior Engineer
Duration: (MM/YYYY) 08/2011 to 07/2012 08/2012 to 06/2015 07/2015 to 05/2016

Research Interests

Vehicle Routing Problems, Network flow and Design Problems, Integer Programming, Heuristic and Metaheuristic Optimization, MCDM techniques, Applications of Operations Research to Service Operations.

Research Publications

- Chakraborty, S., & Agarwal, Y. K. (2021). Solving the team orienteering problem with nonidentical agents: A Lagrangian approach. *Networks*. https://doi.org/10.1002/net.22023
- Chakraborty, S., Sharma, A., & Vaidya, O. S. (2020). Achieving sustainable operational excellence through IT implementation in Indian logistics sector: an analysis of barriers. *Resources, Conservation and Recycling*, 152, 104506.
- Chakraborty, S., & Srivastava, S. K. (2019). A Novel Approach to Understanding Delhi's Complex Air Pollution Problem. *Economic and Political Weekly*, 54(36), 32-39.

Conference Presentations

- Chakraborty, S. & Agarwal, Y. K. (2019, December 19). A Lagrangian Approach for Solving the Team Orienteering Problem with Non-Identical Agents. 2019 Doctoral Colloquium of the XXIII Annual International Conference of the Society of Operations Management (SOM 2019), IIT Kanpur, India.
- Chakraborty, S. & Agarwal, Y. K. (2019, December 16). A Cutting-Plane Approach for Solving the Team Orienteering Problem with Non-Identical Agents. 52nd Annual Convention of Operational Research Society of India and International Conference, 2019 (ORSI 2019), IIM Ahmedabad, India.
- Chakraborty, S. & Agarwal, Y. K. (2019, November 29). A Lagrangian Approach for Solving the Team Orienteering Problem, 19th Consortium of Students in Management Research (COSMAR'19), IISc Bangalore, India.
- Sharma, A., Chakraborty, S., Priya, B., & Vaidya, O. S. (2017, December 15). An application of ISM and IRP for identification and ranking of barriers in successful IT implementation in Indian unorganized logistics sector, Fifth PAN-IIM World Management Conference, IIM Lucknow, India.

Awards and Achievements

- Received the **Best Paper award** (2nd Prize) in Theory and Methodologies category for the paper presented at the Doctoral Colloquium of SOM 2019, held at IIT Kanpur, India, during December 19-20, 2019.
- Received the **Institute Gold Medal** for securing the highest Cumulative Performance Index (CPI) amongst students of all branches in B. Tech., 2011 from NIT Silchar.
- Qualified GATE 2011 in Mechanical Engineering with 98.25 percentile.
- Received **Anundoram Borooah Award** from the Govt. of Assam for securing First Division with Distinction marks in HSLC examination, 2005 conducted by SEBA (was among the 15 Distinction holders in the district).

Academic Services

- Referee: Resources, Conservation and Recycling; Economic & Political Weekly
- Rapporteur, Editorial Assistance: 5th PAN-IIM WMC, IIM Lucknow, India, December 14-16, 2017

Software Skills

• Programming Languages: C, C++, MATLAB

• Mathematical Programming: CPLEX

• System Dynamics Modelling: Vensim

• Simulation: GPSS

• Desktop Applications: Microsoft Word, Excel, PowerPoint, Visual Studio