Curriculum Vitae (CV)

Dr. Dhirendra Prajapati

Postdoctoral Fellow in the Department of Quantitative Methods and Operations Management, Indian Institute of Management, Amritsar, Panjab, India.



Researcher IDs Links:

Google Scholar: https://scholar.google.com/citations?user=-bTw758AAAAJ&hl=en&oi=ao

Web of Science Researcher ID: https://www.webofscience.com/wos/author/record/AGH-5312-2022

Scopus ID: https://www.scopus.com/authid/detail.uri?authorId=57215023349

Vidwan ID: **321770** Profile Score: **8.3** out of **10**

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DOB: July 1, 1991; Nationality: Indian

EDUCATIONAL QUALIFICATION							
Degree	Specialization	Institute / University	Years	CGPA/CPI	Class		
PhD	Mechanical Engineering (Industrial Eng. Mgmt.)	Indian Institute of Information Technology, Design & Manufacturing, Jabalpur, India (Fully Funded by Govt. of India)	2018- 2023	9.0	1 st		
M. Tech	Mechanical Engineering (Manufacturing)	Indian Institute of Information Technology, Design & Manufacturing, Jabalpur, India (Fully Funded by Govt. of India)	2016- 2018	7.2	1 st		
BE	Mechanical Engineering	SITM Bhopal / Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal, India	2010- 2014	7.89	1 st		

RESEARCH AND TEACHING INTERESTS

Research Interests: Supply Chain Network Design and Modeling, Operations Research, E-commerce, Transportation, Logistics Systems, CLSC, Reverse Logistics, Leveraging Blockchain, IoT, AI and ML in Supply Chain Design, Sustainability, Circular Economy, and Optimization.

Thesis Title: Decision Support Systems for Sustainable E-Commerce Logistics and Supply Chain Operations

PROFESSIONAL EXPERIENCE

1. Designation: Assistant Professor in the Department of Industrial and Production Engineering, Shri. G.S. Institute of Technology and Science (SGSITS), Indore (MP), India, (State Government Added Autonomous).

Date of Joining: 23/08/2022 **Date of Leaving:** 19/02/2024

Activities: Teaching, Research, Mentoring, NAAC work, student induction program

Reason for Leaving: Unforeseen family health issue

2. Designation: Postdoctoral Fellow in the Department of Management Science and Engineering, Khalifa University of Science and Technology, Abu Dhabi, UAE.

Date of Joining: 21/02/2024 **Date of Leaving:** 30/04/2024

Activities: Research Work on a project entitled "Leveraging emerging technologies such as IoT, Blockchain, ML, and AI in healthcare data management."

Reason for Leaving: Unforeseen family health issue

Publication's summary

Journals: No. of SCI/SCIE/SSCI: 8 No. of ESCI/Scopus: 4 No. of other peer-reviewed journals: 1

Conferences & Book Chapters (BCs): No. of Conferences: 8 No. of Scopus: 5

Citations Google, WoS, & Scopus: **414**, **201**, **& 259**H-Index Google, WoS, & Scopus: **11**, **8**, **& 10**

PUBLICATIONS

Journal papers

- Dhirendra Prajapati, Saurabh Pratap, Mengdi Zhang, Lakshay & George Q Haung (2022). "Sustainable forward-reverse logistics for multi-product delivery and pickup in B2C E-commerce towards the circular economy".
 International Journal of Production Economics, Elsevier, Vol. 253 Issue No. 0, pages 108606. (https://doi.org/10.1016/j.ijpe.2022.108606). (Indexing: SCIE, IF: 9.8, SCImago Journal Rank: Q1, ABDC Ranking: A, ABS: 3*)
- Dhirendra Prajapati, Sunil Kumar Jauhar, Angappa Gunasekaran, Sachin S. Kamble & Saurabh Pratap (2022). "Blockchain and IoT Embedded Sustainable Virtual Closed-Loop Supply Chain in E-commerce Towards the Circular Economy". Computers & Industrial Engineering, Elsevier, Vol. 172 Part A, pages 108530. (https://doi.org/10.1016/j.cie.2022.108530). (Indexing: SCI, IF: 6.7, SCImago Journal Rank: Q1, ABDC Ranking: A, ABS: 3*)
- Dhirendra Prajapati, Felix T.S. Chan, Yash Daultani, & Saurabh Pratap (2022). "Sustainable Vehicle Routing of Agro-Food Grains in E-commerce Industry." International Journal of Production Research, Taylor & Francis, Vol. 60 Issue No. 24, pages 7319-7344. (https://doi.org/10.1080/00207543.2022.2034192). (Indexing: SCI, IF: 9.2, SCImago Journal Rank: Q1, ABDC Ranking: A, ABS: 3*)
- Dhirendra Prajapati, Felix T.S. Chan, H. Chelladurai, Lakshay Lakshay, and Saurabh Pratap (2022). "An Internet of Things Embedded Sustainable Supply Chain Management of B2B E-commerce", Sustainability, MDPI, Vol. 14 Issue No. 9, pages 5066. (https://doi.org/10.3390/su14095066). (Indexing: SCIE, IF: 3.9, SCImago Journal Rank: Q1)
- Dhirendra Prajapati, H. Chelladurai, Fuli Zhou, Andrew W. H. Ip, & Saurabh Pratap (2022). "Sustainable Multiproducts Delivery Routing Network Design for Two-echelon Supplier Selection Problem in B2B E-commerce Platforms". RAIRO- Operations Research, EDP Sciences. Vol. 56 Issue No. 4, pages 2115-2137. (https://doi.org/10.1051/ro/2022072). (Indexing: SCIE, IF: 1.8, SCImago Journal Rank: Q2)
- *Dhirendra Prajapati*, Fuli Zhou, Ashish Dwivedi, Tripti Singh, Lakshay & Saurabh Pratap (2022). "Sustainable Agro-Food Grains Supply Chain with Innovative Packaging in E-commerce Towards the Circular Economy." *Sustainability*, MDPI, Vol. 15 Issue No. 4, pages 8698. (https://doi.org/10.3390/su14148698). (Indexing: SCIE, IF: 3.9, SCImago Journal Rank: Q1)

- Yash Daultani, Naoufel Cheikhrouhou, Saurabh Pratap, *Dhirendra Prajapati*. (2022) "Forward and Reverse Supply Chain Network Design for New and Refurbished Products in E-commerce Logistics." *Operations and Supply Chain Management*, OSCM, Vol. 14 Issue No. 14, pages 540-550. (http://doi.org/10.31387/oscm0510365). (Indexing: ESCI, Scopus, Scimago Journal Rank: Q2, ABDC Ranking: C)
- Dhirendra Prajapati, Fuli Zhou, Mengdi Zhang, H. Chelladurai, & Saurabh Pratap. (2021) "Sustainable Logistics Network Design for Multi-products Delivery Operations in B2B E-commerce Platform". Sadhana: Indian Academy of Sciences, Springer, Vol. 46 Issue No. 100, pages 1-13. (https://doi.org/10.1007/s12046-021-01624-1). (Indexing: SCIE, IF: 1.4, SCImago Journal Rank: Q2)
- Dhirendra Prajapati, Manoj M Kumar, H. Chelladurai, Saurabh Pratap, & MD Zuhair (2021). "Sustainable Logistics Network Design for Delivery Operations with Time Horizons in B2B E-commerce Platform". Logistics, MDPI, Vol. 5 Issue No. 3, pages 61. (https://doi.org/10.3390/logistics5030061). (Indexing: ESCI, IF: 3.6)
- Dhirendra Prajapati, Yash Daultani, Harpreet Singh, & Saurabh Pratap. (2020) "A Clustering Based Routing Heuristic for E-commerce Fresh Food Last-Mile Logistics Operations", Global Business Review, SAGE, Vol. 24 Issue No. 1, Pages 0972150919889797. (https://doi.org/10.1177%2F0972150919889797). (Indexing: ESCI, Scopus, IF: 2.4, Scimago Journal Rank: Q2, ABDC Ranking: C, ABS: 1*)
- Mengdi Zhang, Saurabh Pratap, Zhiheng Zhao, *Dhirendra Prajapati*, & George Q Huang. (2020). "Forward and reverse logistics vehicle routing problems with time horizons in B2C e-commerce logistics". International Journal Production & Francis, Vol. 59 Issue No. 20. Research, **Taylor** pages 6291-6310. (https://doi.org/10.1080/00207543.2020.1812749). (Indexing: SCI, IF: 9.018, SCImago Journal Rank: Q1, ABDC Ranking: A, ABS: 3*)
- Dhirendra Prajapati, Yash Daultani, Naoufel Cheikhrouhou, & Saurabh Pratap. (2020). "Identification and ranking of key factors impacting the efficiency of Indian shipping logistics sector," OPSEARCH, Springer, Vol. 57 Issue No. 0, pages 765-786. (https://doi.org/10.1007/s12597-020-00442-z). (Indexing: ESCI, Scopus, IF: 1.6, SCImago Journal Rank: Q2, ABDC Ranking: C, ABS: 1*)
- Ashish Dwivedi, Ajay Jha, *Dhirendra Prajapati*, Nenavath Sreenu, & Saurabh Pratap. (2020). "Meta-heuristic algorithms for solving the sustainable agro-food grain supply chain network design problem," *Modern Supply Chain Research and Applications*, Emerald, Vol. 2, Issue No. 3, pages 161-177. (https://doi.org/10.1108/MSCRA-04-2020-0007). (FMS Rank: C)

Conference papers

- Dhirendra Prajapati and Praveer Agrawal (2023). An IoT-embedded smart, sustainable reverse logistics system towards the circular economy, Proceedings of 9th International and 30th All India Manufacturing Technology, Design & Research (AIMTDR 2023) Conference, IIT (BHU), Varanasi, India. (Accepted for publication in Conference Proceeding) (Indexing: Scopus)
- Dhirendra Prajapati, Kumar Rohit, Ayush Maurya, & Ashish Dwivedi. (2023). "Metaheuristic and Exact Approaches for Cost Optimization in Multi-Echelon Multimodal Transportation Network" "Lectures Notes in Network and Systems" Springer through "12th International Conference on Soft Computing for Problem Solving (SocProS 2023) Moving Towards Society 5.0", IIT Roorkee, India. (Indexing: Scopus)

- Dhirendra Prajapati, Rajeev Agarwal, H. Chelladurai, Lakshay Lakshay, and Saurabh Pratap. (2021). "Develop a
 Framework for Sustainable supply Chain problem for Textile industry: In B2B E-commerce Platform", International
 Conference on Industrial Engineering Management (ICIEM-2021), MNIT, Jaipur, India. (Awarded by best paper
 presentation). (Indexing: Scopus)
- Dhirendra Prajapati, Arjun R Harish, Saurabh Pratap, Mengdi Zhang, & Yash Daultani. (2020). "Multi-cyclic scheduling of identical parts in an N-machine no-wait robotic cell," Proceedings of the International Conference on Industrial Engineering and Operations Management (IEOM) Dubai, UAE. (Indexing: Scopus)
- Yash Daultani, Naoufel Cheikhrouhou, Saurabh Pratap, & *Dhirendra Prajapati*. (2019). "Designing Forward and Reverse Supply Chain Network for Refurbished Products" Proceedings of the 9th International Conference on Operations and Supply Chain Management (OSCM), Vietnam. (Indexing: Scopus)
- Dhirendra Prajapati, & Saurabh Pratap. (2019). "Minimization of Time Window for Delivery of Orders in B2B E-commerce", Proceedings of 5th International Conference on Industrial Engineering (ICIE-2019), SV NIT, Surat, India.
- Manoj M Kumar, *Dhirendra Prajapati*, Prabal Pratap, Fuli Zhou, & Saurabh Pratap. (2019). "Berth and Quay Crane Allocation Problem for the Container Handling," 5th *International Conference on Industrial Engineering (ICIE-2019)*, SV NIT, Surat, India.
- Dhirendra Prajapati, Ajay Jha, Nenavath Sreenu, & Saurabh Pratap. (2019). "An MINLP Approach: Sustainable Agro-Food Supply Chain Network Design in Indian Context," 6th Agro-Horticulture Supply Chain Conference (AHSCC), UPES, Dehradun, India. (Awarded by best paper presentation).

Papers under review

- Dhirendra Prajapati, Sunil Kumar Jauhar, Ashish Dwivedi, Sanjoy Poul, & Saurabh Pratap. "A quantitative model for circularity and sustainability in e-commerce closed-loop supply chain." Journal of Cleaner Production.
 (Indexing: SSCI, IF: 13.4, SCImago Journal Rank: Q1, ABDC Ranking: A, ABS: 2*)
- Dhirendra Prajapati, Ayush Maurya, Felix T.S. Chan, & Saurabh Pratap. "Develop Mathematical and Data-Driven Models for Multi-Objective Problem of Sustainable B2B E-Commerce Platform." International Journal of Production Research. (Indexing: SCIE, IF: 9.2, SCImago Journal Rank: Q1, ABDC Ranking: A, ABS: 3*)
- Dhirendra Prajapati et al. "Identifying and Prioritizing the Factors Using DEMETAL: An Implementation of Blockchain Technology in Healthcare Supply Chain." Transportation Research Part D: Transport and Environment. (Indexing: SCIE, IF: 7.6, SCImago Journal Rank: Q1, ABDC Ranking: A)
- Dhirendra Prajapati. "Industry 4.0: Sustainable Reverse-Forward Logistics for the Recovery Used Electronic Products Towards the Circular Economy", International Journal of Production Economics. (Indexing: SCIE, IF: 12, SCImago Journal Rank: Q1, ABDC Ranking: A, ABS: 3*)

Working papers

Dhirendra Prajapati's "Cost-Efficient Sustainable Reverse-Forward Logistics Constructed with Blockchain and IoT:
 Recovery of Used Electronic Products in Circular Economy Perspective" will be submitted to the International

Journal of Production Economics. (Indexing: SCIE, IF: 12, SCImago Journal Rank: Q1, ABDC Ranking: A, ABS: 3*)

 Dhirendra Prajapati. Considering Blockchain and IoT related Factors in Sustainable multi-echelon supply chain network with multimode of transport for B2B e-commerce industry" Transportation Research Part E: Logistics and Transportation Review. (about to submit)

AWARDS & ACHIEVEMENTS

- Received a **Postdoctoral fellowship** at Khalifa University Science and Technology, Abu Dhabi, UAE, in 2024.
- Awarded with Best PhD Thesis Award 2023 at "12th International Conference on Soft Computing for Problem Solving (SocProS 2023) Moving Towards Society 5.0", held at Indian Institute of Technology (IIT) Roorkee, India, during 11th 13th August 2023.
- Awarded with Best Paper Presentation at "the International Conference on Industrial Engineering and Management, ICIEM-2021, MNIT, Jaipur, India" from 17th -19th December 2021.
- Awarded with Best Paper Presentation at "6th Agro-Horticulture Supply Chain Conference, UPES, Dehradun, India" on 4th & 5th October 2019.
- Awarded Fellowship for Training of Young Scientist of M.P. Council of Science and Technology on 35th M.P.
 Young Scientist Congress (28th & 29th February 2020).
- Scholarship awarded by MHRD (Indian Govt.) in Aug 2018 (for Ph.D. Program).
- Consolation Award in an essay writing competition on "Advent of Artificial Intelligence" during Hindi Fortnight, organized at IIITDM Jabalpur from 14th -28th November 2019.
- Secured the *First Position in a Poster Presentation* on "*Integrity- A way of life*" during Vigilance Awareness
 Week 2019, organized at IIITDM Jabalpur from 28th October to 2nd November 2019.

SKILLS	
Software proficiency	LINGO, MATLAB, MINITAB, MS Office Package

ACTIVITIES		
ACTIVITIES	 Online short-term course on "Data Analytics and Predictive Techniques for Multi-Modal Transportation Systems (MTS)" organized by I-DAPT Hub Foundation IIT(BHU), Varanasi, India, from 26th - 30th June 2023. Online short-term course on "Improvement Strategies for Urban Freight" 	
Workshops/Short Term Course attended	 Transportation System (FTS)" organized by I-DAPT Hub Foundation IIT(BHU), Varanasi, India, from 28th Feb - 4th March 2023. Two-week online Faculty Development Programme on "IoT & Applications (Smart Systems)" jointly organized by Electronics & ICT Academies at IIT Guwahati, NIT Patna, IIT Kanpur, MNIT Jaipur, IIT Roorkee, and IIITDM Jabalpur, during 14th - 25th February 2022. Online short-term course on "Data Analytics and Predictive Techniques for Urban 	

	 Freight Transportation System (FTS)" organized by I-DAPT Hub Foundation IIT(BHU), Varanasi, India, from 10th - 14th November 2021. Global Online Certification Course on "Business and Operations Analytics" by Prof. David Simchi-Levi (MIT, USA) & Prof. Manoj K. Tiwari (Director, NITIE), held at NITIE Mumbai, India, duration: 3rd July – 5th September 2021. Online short-term course on "Data Analytics and Predictive Technologies" course organized by I-DAPT Hub Foundation, IIT(BHU), Varanasi, India, from 05th - 10th July 2021. Online Faculty Development Programme on "Evolution of Intelligent Systems" organized by the Institute For Engineering Research and Publication (IFERP) on May 11, 2022. Short-term course on "Earth Observation for Carbon Cycle Studies" conducted by IIRS-ISRO, Department of Space, Govt. of India, from 21st – 25th June 2021. Design Workshop (DeW 7.0) at IIITDM Jabalpur on "Application of Artificial Intelligence and IoT in Smart Systems" held on 13th -15th February 2020. 		
	 Gian course on "Production Logistics: Theoretical and Practical Approach to the Theory of Constraints" from 1st - 8th September 2018, organized by IIITDM Jabalpur. National Symposium on Mathematical Sciences and Applications (NSMSA-2019) on the Occasion of National Mathematics Day (132nd Birth Anniversary of Srinivasa Ramanujan) held on 22nd - 23rd December 2019. Design workshop (DeW) 2016 at IIITDM Jabalpur, on "Internet of Process Centric Design and Manufacture," held on 12th -14th December 2016. Played the role of team leader in my research team. 		
Team Leader Academic/Administrative Responsibility till PhD	 Played the role of team leader in my research team. Worked as a volunteer in <i>National Innovation Drive-2017</i> under the Ministry of Human Resource Development, Government of India on 10th - 11th November 2017. Worked as a teaching assistant (TA) from July 2016 to July 2022 during M-Tech and PhD durations at IIITDM Jabalpur. 		
Editorial Board	Reviewer Activities International Journal of Production Research (Taylor & Francis) IEEE Transaction on Engineering Management (IEEE) Computers & Industrial Engineering (Elsevier) Operations Management Research (Springer) Production & Manufacturing Research (Taylor & Francis) OPSEARCH (Springer) Cogent Engineering (Taylor & Francis) SAGE Open Journal (SAGE Publishing) International Journal of Engineering Business Management (SAGE Publishing)		

Complexity (Hindawi)
Advances in Operations Research (Hindawi)
Journal of Environmental and Public Health (Hindawi)

Professional Membership

- The Operational Research (OR) Society- Membership No. 65094
- Industrial Engineering and Operations Management (IEOM)- Membership No. 1439453
- Institute of Mathematical Statistics (IMS)- Membership No. 35099
- International Association of Engineers (IAENG)
- RSIS International Research and Scientific Innovation Society (Member)
- Materials Research Society (MRS)
- Institute For Engineering Research and Publication (IFERP)

Research Collaborations				
Abroad	India			
Hong Kong University (HKU), Hong Kong.	IIM Kashipur			
• EDHEC-Business School, Lille, France	 IIM Lucknow 			
• Charlton College of Business, University of Massachusetts Dartmouth, US	IIT BHU Varanasi			
 University of Applied Sciences Geneva HES-SO, Carouge, Switzerland 	 IIT Hyderabad 			
 University of Technology Sydney, Australia 	 MNIT Jaipur 			
 Macau University of Science and Technology, Taipa, Macau, China 	 O.P. Jindal GU 			
 Nanjing University of Posts and Telecommunications, Nanjing, China 	Sonipat, Haryana			
• Zhengzhou University of Light Industry (ZULI), Zhengzhou, China				

References				
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Place: Amritsar, India

Date: July 29, 2024