

# Dr. Malolan Sundararaman

B.E (Mech.) – Gold Medal, UCEV (Anna University Chennai), 2008-2012

M.Sc (Engg.) & PhD, IISc Bangalore, 2012-2018

"Man is made by his belief. As he believes, so he is." - **Bhagavad Gita (18:58)**

"Nothing is impossible in life. Awake, arise and stop not till the goal is achieved" - **Swami Vivekananda**



---

## Experience

Ford Motor Company

- Analyst : 16<sup>th</sup> Aug 2017 – 31<sup>st</sup> Sep 2018
- Senior Analyst : 1<sup>st</sup> Oct 2018 – 11<sup>th</sup> May 2020

National Institute of Technology Tiruchirappalli

- Assistant Prof. : 13th May 2020 – Present

## Research Interests

Closed Loop Supply Chains

- Return Acquisition Price Modelling
- Remanufacturing System Design
- Sustainable Economic Policies

Manufacturing 4.0

- Performance Monitoring & Prescriptions
- 

## Publications & Invited Talks

### Journals

Malolan S. and Mathirajan M. (2020) "A Methodology for Determining the Optimal Reverse Flow Capacities and the Breakeven Period for a Multi Products–Component Remanufacturing Problem of an OEM", *Operations Management Research* (Accepted) (ISSN: 19369743, 19369735)

Sundararaman, M. and Muthu, M. (2020) "Component Remanufacturing – A New Prospective Business Approach for the Indian Automobile Sector", *OPSEARCH*, pp. 1-37 (ISSN: 00303887, 09750320)

Malolan S. and Mathirajan M. (2018), "Inventory and Production Planning for Component Remanufacturing in an Original Equipment Manufacturer–Closed Loop Supply Chain", *International Journal of Logistics Systems and Management*, Vol.29 (4) pp. 524-556 (ISSN: 17427975, 17427967)

### Book Chapters

Malolan S. and Mathirajan M. (2020), "Mathematical Models for Sustainable Inventory and Production Plans for Component Remanufacturing Problems of OEM with Break-Even Period Determination". In: *Ramanathan U., Ramanathan R. (eds) Sustainable Supply Chains: Strategies, Issues, and Models*. Springer, Cham, pp. 75-132

### Invited Talks

Malolan Sundararaman (2019) 'Machine's Language – Understanding It The Statistical Way', Invited Talk at: *Two Day National Workshop on Internet of Things in Supply Chain Management*, Indian Institute of Information Technology Design and Manufacturing (IIITDM), Kancheepuram, India.

Malolan Sundararaman (2019) 'Remanufacturing – Is it the Next Revolution for Manufacturing?', Invited Talk at: *Manufacturing and Supply Chain Analytics Knowledge Share*, Ford India Pvt. Ltd., India.

Malolan Sundararaman (2016) 'Green Chemistry – A Sustainable Innovation', Invited Talk at: *Sakura Science Program*, Toyoyashi University of Technology, Toyoyashi, Japan

## Conference Presentations

Malolan S. and Mathirajan M. (2018). 'Inventory and Production Decisions for Multi Products Component Remanufacturing with Backordering and Product Substitution Problem of an Original Equipment Manufacturer', Presented at: *3rd International Conference on Advances in Industrial Engineering Applications*, January 3 – 5 2018, Chennai, India

Malolan S. and Mathirajan M. (2016). 'Resource Planning for a Multi Period Multiple Product Assembly in a Component Remanufacturing System of an Original Equipment Manufacturer', Presented at: *4th International Conference on Business Analytics and Intelligence*, December 19 – 21 2016, Bangalore, India

Malolan S. and Mathirajan M. (2014). 'A Mathematical Model for Inventory Management and Production Planning for an Integrated Assembling-Manufacturing-Remanufacturing-Disposal System with Return Compensation', Presented at: *27th European Conference on Operational Research*, July 12 – 15 2015, Glasgow, United Kingdom

## **Awards and Achievements**

### Awards

- *Asia Pacific Recognition Award*, for Manufacturing 4.0 Pilot, at Ford India Pvt. Ltd., December 2018
- *Spot Recognition Award*, for Supplier Cost Reduction Project, at Ford India Pvt. Ltd., March 2018
- *Gold Medal*, B.E (Mechanical), University College of Engineering (Anna University Chennai), May 2012

### Achievements

- "Optimization in SAS" *Certification* from SAS, at Ford India Pvt. Ltd., March 2018
- Conducted knowledge share on "Remanufacturing Best Practices", at Ford India Pvt. Ltd., November 2017

## **Teaching Interests**

- Business Statistics
- Data Analytics
- Operations Research
- Operations Management
- Supply Chain Management

## **Contact Information**

### **Address:**

Cabin Number 13  
Department of Management Studies  
National Institute of Technology Tiruchirappalli  
Tiruchirappalli – 620 015, India

### **E-Mail:**

malolan@nitt.edu

### **LinkedIn Profile:**

<https://www.linkedin.com/in/dr-malolan-sundararaman-279b2290/>