Prof. C. Rajendran

Profile and Success Story as **Distinguished Fellow** in **Artificial Intelligence**, **AI** Forum of IIT Alumni Council

Prof. C. Rajendran is a towering name in the fields of industrial engineering, operations *research*, and artificial intelligence, renowned for his distinctive blend of deep theory, innovative methodology, and practical impact. Recently honored as a **Distinguished Fellow** in **Artificial Intelligence** by the **AI** Forum of IIT Alumni Council, Prof. Rajendran's story exemplifies dedication, intellectual *leadership*, and an unwavering commitment to the advancement of science and society.

Academic Foundations and Expertise

Prof. Rajendran holds a Ph.D. in Industrial Engineering and Management from IIT Madras (1991), having earlier completed his M.E. from the renowned College of Engineering, Guindy (Anna University) and a B.E. (Honours) in Mechanical Engineering. Further acknowledged by the conferral of an honorary doctorate (Dr.rer.pol.h.c.) from the University of Passau, Germany in 2017, he has steadily risen to become a **Professor** at the Department of Management Studies, IIT Madras, where he has mentored generations of students and faculty.

Fields of Impact

With specialized interests in scheduling, supply chain management, production and operations management, logistics, inventory systems, and quality management, Prof. Rajendran champions the application of data analytics, empirical quality studies, and meta-heuristics—including genetic algorithms and swarm-based techniques. His academic pursuits frequently combine rigorous quantitative models with **AI**-driven heuristics, addressing real-world problems in manufacturing, service systems, and complex supply chains. These intersections of operational *research* and artificial intelligence have earned him a place among India's most innovative engineering thinkers.

Research, Publications, and Recognition

Prof. Rajendran's *research* credentials are exemplary: he has published extensively in top international journals and conferences, sharing pioneering algorithms and **AI**-driven optimization models for scheduling and logistics management problems. His invitation to serve as the Mindtree Faculty Fellow in Data Science and **Artificial Intelligence** at IIT Madras testifies to his intellectual *leadership* and reputation in the academic community.

He has also been awarded the coveted Alexander von Humboldt Research Fellowship in Germany, recognizing his global *research* standing. Prof. Rajendran's contributions to the use of swarm intelligence, genetic algorithms, and simulation-based optimization in scheduling and supply chain scenarios serve as textbook examples for the use of artificial intelligence in operations *research*.

National Leadership and Success Story

Beyond *research*, Prof. Rajendran has been instrumental in developing next-generation curricula and *research* ecosystems at IIT Madras, propelling the institute to the forefront of **AI**-driven management and engineering education in India. His *leadership* extends through key faculty roles in advancing data science, analytics education, and mentoring doctoral and postdoctoral researchers who now hold influential roles in academia and industry worldwide.

The hallmark of his success is his dedication to bridging theory and practice—consulting for industries, contributing to national policy on quality and logistics, and nurturing startups in decision sciences. Prof. Rajendran's *vision* has always been to enable intelligent, adaptive systems that combine **AI** and operational excellence, directly benefiting manufacturing, healthcare, and service sectors at scale.

Legacy and Lasting Impact

Prof. Rajendran's influence is visible in his mentees' achievements, the transformational educational programs he has conceived, his international outreach, and his ability to bring together multidisciplinary teams for grand challenges. His elevation as a **Distinguished Fellow** in **Artificial Intelligence** stands as recognition not only for a lifetime of intellectual originality but also for sustained societal impact—the very ethos of the IIT Alumni spirit.

Prof. Rajendran remains a beacon for those aspiring to blend analytics, **AI**, and domain science for creating large-scale, socially relevant solutions.

Key Awards & Recognitions at a Glance

Distinguished Fellow, AI Forum, IIT Alumni Council.

Alexander von Humboldt Research Fellowship.

Mindtree Faculty Fellow in Data Science and **Artificial Intelligence**, IIT Madras.

Multiple appointments as Chair/Advisor to international *research* bodies.

Dozens of high-impact journal publications and *research* awards.

Prof. C. Rajendran's journey highlights the transformative power of combining deep *research* with applied artificial intelligence, inspiring future generations to strive for excellence and positive change.