

# Advanced Manufacturing and Automation VIII: Lecture Notes in Electrical Engineering

**Edited by: Dr. Adrian O'Malley**

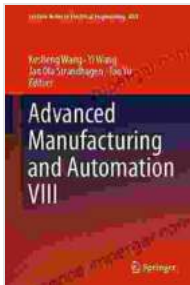
**Publisher: Springer International Publishing**

**Year: 2019**

**Pages: 576**

**: 978-3-030-20091-5**

This book contains the proceedings of the 8th International Conference on Advanced Manufacturing and Automation (ICAMA 2018), held in Plymouth, UK, on September 24-25, 2018. The conference covers a wide range of topics in advanced manufacturing and automation, including additive manufacturing, robotics, machine learning, and industrial informatics.



## Advanced Manufacturing and Automation VIII (Lecture Notes in Electrical Engineering Book 484)

★★★★★ 5 out of 5

Language : English

File size : 98722 KB

Text-to-Speech : Enabled

Enhanced typesetting : Enabled

Print length : 1076 pages



The book is divided into four parts:

1. **Additive Manufacturing:** This part covers the latest developments in additive manufacturing, including new materials, processes, and applications.
2. **Robotics:** This part covers the latest developments in robotics, including new robots, sensors, and control systems.
3. **Machine Learning:** This part covers the latest developments in machine learning, including new algorithms, applications, and hardware.
4. **Industrial Informatics:** This part covers the latest developments in industrial informatics, including new data acquisition and analysis techniques.

The book is a valuable resource for researchers, engineers, and practitioners in the field of advanced manufacturing and automation.

## **Table of Contents**

### **1. Part 1: Additive Manufacturing**

- Chapter 1: Additive Manufacturing of Metal Matrix Composites
- Chapter 2: 3D Printing of Ceramics
- Chapter 3: Laser Powder Bed Fusion of Polymers
- Chapter 4: Electron Beam Melting of Metals
- Chapter 5: Direct Ink Writing of Electronics

### **• Part 2: Robotics**

- Chapter 6: Industrial Robots
- Chapter 7: Mobile Robots
- Chapter 8: Collaborative Robots
- Chapter 9: Robot Sensors
- Chapter 10: Robot Control Systems
  
- **Part 3: Machine Learning**
  - Chapter 11: Machine Learning Algorithms
  - Chapter 12: Machine Learning Applications
  - Chapter 13: Machine Learning Hardware
  - Chapter 14: Deep Learning
  - Chapter 15: Reinforcement Learning
  
- **Part 4: Industrial Informatics**
  - Chapter 16: Data Acquisition
  - Chapter 17: Data Analysis
  - Chapter 18: Data Visualization
  - Chapter 19: Industrial Internet of Things
  - Chapter 20: Cyber-Physical Systems

## **Author Biography**

Dr. Adrian O'Malley is a Professor of Manufacturing Engineering at the University of Plymouth, UK. He is the Director of the Centre for Advanced Manufacturing and Automation (CAMA) and the Editor-in-Chief of the International Journal of Advanced Manufacturing and Automation. He has published over 200 papers in journals and conferences and is the author of several books on advanced manufacturing and automation.

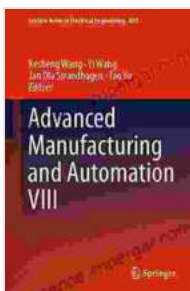
## Reviews

"This book is a valuable resource for researchers, engineers, and practitioners in the field of advanced manufacturing and automation." - Professor John R. Williams, University of California, Berkeley

"This book provides a comprehensive overview of the latest developments in advanced manufacturing and automation. It is a must-read for anyone working in this field." - Professor Dr.-Ing. habil. Peter Nyhuis, Technical University of Munich

## Free Download Your Copy Today

The book is available for Free Download from Springer International Publishing: <https://link.springer.com/book/10.1007/978-3-030-20091-5>



## Advanced Manufacturing and Automation VIII (Lecture Notes in Electrical Engineering Book 484)

★★★★★ 5 out of 5  
Language : English  
File size : 98722 KB  
Text-to-Speech : Enabled  
Enhanced typesetting : Enabled  
Print length : 1076 pages

FREE

DOWNLOAD E-BOOK



## Unlock Your Financial Future: Discover the Transformative Power of The Socionomic Theory of Finance

In a tumultuous and ever-evolving financial landscape, understanding the underlying forces that drive market behavior is paramount. The Socionomic Theory of Finance (STF)...



## Beyond Segregation: Multiracial and Multiethnic Neighborhoods

The United States has a long history of segregation, with deep-rooted patterns of racial and ethnic separation in housing and neighborhoods. However, in recent...