## **IJARSCT**



International Journal of Advanced Research in Science, Communication and Technology

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Impact Factor: 7.67

Volume 5, Issue 3, November 2025

## A Comprehensive Review On AI-Driven Automation and Its Implications for Global Job Market

## Vishal Borate, Dr. Alpana Adsul, Gaurav Kamble

Department of Computer Engineering
Dr. D. Y. Patil College of Engineering and Innovation, Varale, Talegaon, Pune, India
vkborate88@gmail.com, hodcomputer@dypatilef.com, kamblegaurav193@gmail.com

Abstract: The rapid advancement of Artificial Intelligence (AI) technologies is reshaping the global job market, influ- encing employment patterns, skill requirements, and workforce dynamics across industries. AI systems ranging from machine learning algorithms to intelligent automation are streamlining operations, augmenting decision-making, and replacing repetitive tasks. While these innovations enhance productivity and eco- nomic efficiency, they also raise concerns about job displacement, reskilling needs, and equitable access to emerging opportunities. This review paper examines recent developments in AI-driven labor transformation, evaluates sector-specific impacts, highlights implementation challenges, and explores future directions for inclusive and adaptive workforce strategies.

**Keywords**: Artificial Intelligence, Job Market, Automation, Workforce Transformation, Employment Trends, Skill Develop- ment, Labor Economics





