

AI OPPORTUNITIES AND CHALLENGES

1. Introduction

2. Thesis statement: This essay would highlight challenges of AI as well as opportunities.

3. Understanding AI.

4. Challenges of AI

4.1 Job displacement due to automation

- a. High speed and efficiency threats human jobs
- b. Vulnerable sectors: Retail, health and manufacturing
- c. Examples: Global statistics from ILO

4.2 Skills mismatch and widening inequality

- a. huge division in skill mismatch
- b. Rural-urban division in digital access
- c. Inequal payments.

4.3 Threat to source of life

- a. AI consumes high volume of freshwater
- b. Existing scantiness of water ~~sets~~ pose a risk to AI.

c. Middle east; South Asia examples.

4.4 Privacy ~~issue~~ and Security Risk

- a. AI access to major platforms constitutes privacy concern
- b. Transformation of hard data into soft data creates security threat.
- c. Exposure to sensitive information; examples of Meta and McDonald's AI chatbox.

4.5 Emerging Risk to human safety.

- a. Indecisive algorithm of AI regarding humanity
- b. Case study of anthropic; AI try to kill human

4.6. Accountability gap

- a. ~~Who~~ takes responsibility when AI causes accidents?
- b. Lack of transparency; black box of AI
- c. Case study of Uber Self-Driving Car Accident 2018, USA.

5. Opportunities of AI

5.1 Emergence of new sectors.

- a. AI Software and platforms.
- b. Robotics and automation, AI Cybersecurity
- c. Surge in employment.

5.2 Building economies

- a. High productivity and efficiency in workplaces
- b. ^{Reduction} ~~Decrease~~ of human error; resource optimization
- c. 24/7 operation without fatigue; meets desired results

5.3 Advancements in existing domains

- a. Healthcare system: Telemedicine, robotic surgery and automation
- b. Development in defense; autonomous drones and robotic vehicles;
 - Precision guided weapons; AI power surveillance
- c. Progress in education system; E-learning
 - Virtual and augmented reality (VR/AR) classrooms
 - Digital libraries; automated grading and assessment tools

5.4. Strengthening safety

- a. Prediction of hazards
- b. Continuous monitoring systems
- c. Risk reduction through preventive measures

5.5 Global leverage

- a. Countries with superior AI can gain dominance
- b. Economical, technological and geopolitical influence
- c. Example of U.S and China

6. Conclusion.

INTRODUCTION

"We are moving towards a world where AI can do more than humans, and we must ensure it's beneficial"

Geoffrey Hinton (Godfather of deep learning)

For centuries, humans have created tools and support systems to make tasks more efficient and conserve energy. Today, AI is an example of this effort which ~~created~~ ~~assess~~ simulate human intelligence and ~~assist in~~ ~~tasking~~, performing complex tasks, ~~providing assistance in~~ various fields. AI enables machines to perform tasks that normally require human intelligence such as learning, reasoning and decision making. AI has transformed industries by improving productivity, enhancing safety and fostering innovation. However it also brings significant challenges including jobs displacement, ethical dilemmas, security risk and responsibility taking dilemma. Besides this, AI ~~also~~ ~~create~~ contributes to existing paucity of water, which poses threat to human life.