AI-Induced Job Displacement

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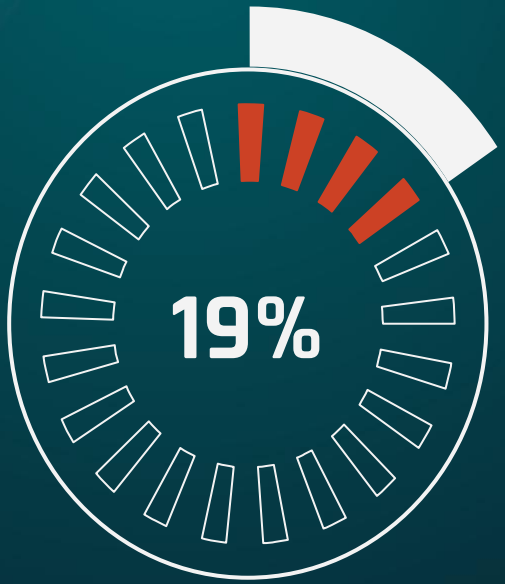
How many of you are worried about AI taking jobs in the future?



Percent of employed U.S adults who think chatbots like ChatGPT will have a major impact on their job in the next 20 years

(Pew Research Center, 2023)

Thesis?

Growth > Harm

Overview

- Background on Technology and Job Displacement
- Ethical Concerns
- Solutions
- Limitations
- Conclusion

Background

History of Technological Unemployment

- AI is not the first example of technology being seen as a threat to employment
- One of the earliest examples is the mob reactions to automated mills in the early 17th century
- The Luddite movement in the early 19th century resulted in widespread destruction of machinery in England
- This movement was stamped out with harsh punishments from the government, but their principles remained

(Technological Unemployment. A Brief History of an Idea, 2017)

Electronic Data Processing

- **Electronic Data Processing (EDP)** was a new method of data processing that emerged in the American workplace in the 1950s
- Employees at all levels were affected
- The threat of job loss was most relevant to workers with few additional marketable skills
- Employers did little to ease employee fears or recognize potential problems with the new technology

(Today's Automation Anxiety Was Alive and Well in 1960, 2016)

The Computer Revolution

- In the 1980s, computers first became commonplace in the home
- Despite the positives of this change, fears of further technological unemployment grew
- However, during this time, employment of high-skilled workers and employment at innovation firms both increased
- Employment also increased for medium-skilled workers who were predicted to be replaced almost completely

(The Phantom of Technological Unemployment, 2019)

Ethical Concerns

Widening the Gap

Job Loss and Economic Inequality:

Automation leads to a widening wealth gap, benefiting highly educated individuals while leaving less-educated workers behind.

(The Oxford handbook of ethics of AI, 2020)

Regional Economic Disparities

- **Localized Job Loss:** Certain regions suffer more from job displacement, leading to concentrated unemployment.
- **Migration Pressures:** Displaced workers migrate to cities, leading to overcrowding and increased competition for jobs.
- **Community Impact:** Economic decline erodes community stability and increases poverty rates.

Lack of Support for Displaced Workers

- **Retraining Programs:** Few companies provide effective training initiatives for displaced workers.
- **Weak Safety Nets:** Insufficient unemployment benefits and reskilling support leave workers vulnerable.
- **Mental Health Issues:** Job loss can lead to increased stress and a loss of personal identity for affected workers.

Solutions

Addressing the Widening Gap

- **Retraining Programs:** Invest in skill development to prepare workers for new roles.
- **Job Creation:** AI can generate tech jobs that require skilled labor.
- **Inclusive Hiring Practices:** Encourage companies to diversify their workforce.

Bridging Regional Economic Disparities

- **Innovation Hubs:** Develop local tech initiatives to stimulate growth in underserved areas.
- **Remote Work Opportunities:** Promote remote work to allow access to jobs regardless of location.
- **Infrastructure Investment:** Fund educational and training resources in economically disadvantaged regions.

Strengthening Support for Displaced Workers

- **Enhanced Safety Nets:** Expand unemployment benefits and support programs for laid-off workers.
- **Corporate Responsibility:** Encourage businesses to invest in employee retraining and development.
- **Mental Health Resources:** Provide access to counseling and mental health support for affected workers.

Limitations

Limitations of AI

- Lacks Emotional Intelligence
- No Creative Thinking
- Limited Contextual Understanding
- Dependence on Data
- Ethical Judgments

(MIT, 2024)

Conclusion

- **Advancement is Constant:** We've always adapted to new technology.
- **Displacement Will Happen:** Some jobs will be replaced, but new ones will emerge.
- **Solutions Are Available:** Retraining and supportive policies can help.
- **AI Has Limits:** It lacks creativity, emotions, and ethical judgment.

Thank you!

Any Questions?

Sources

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