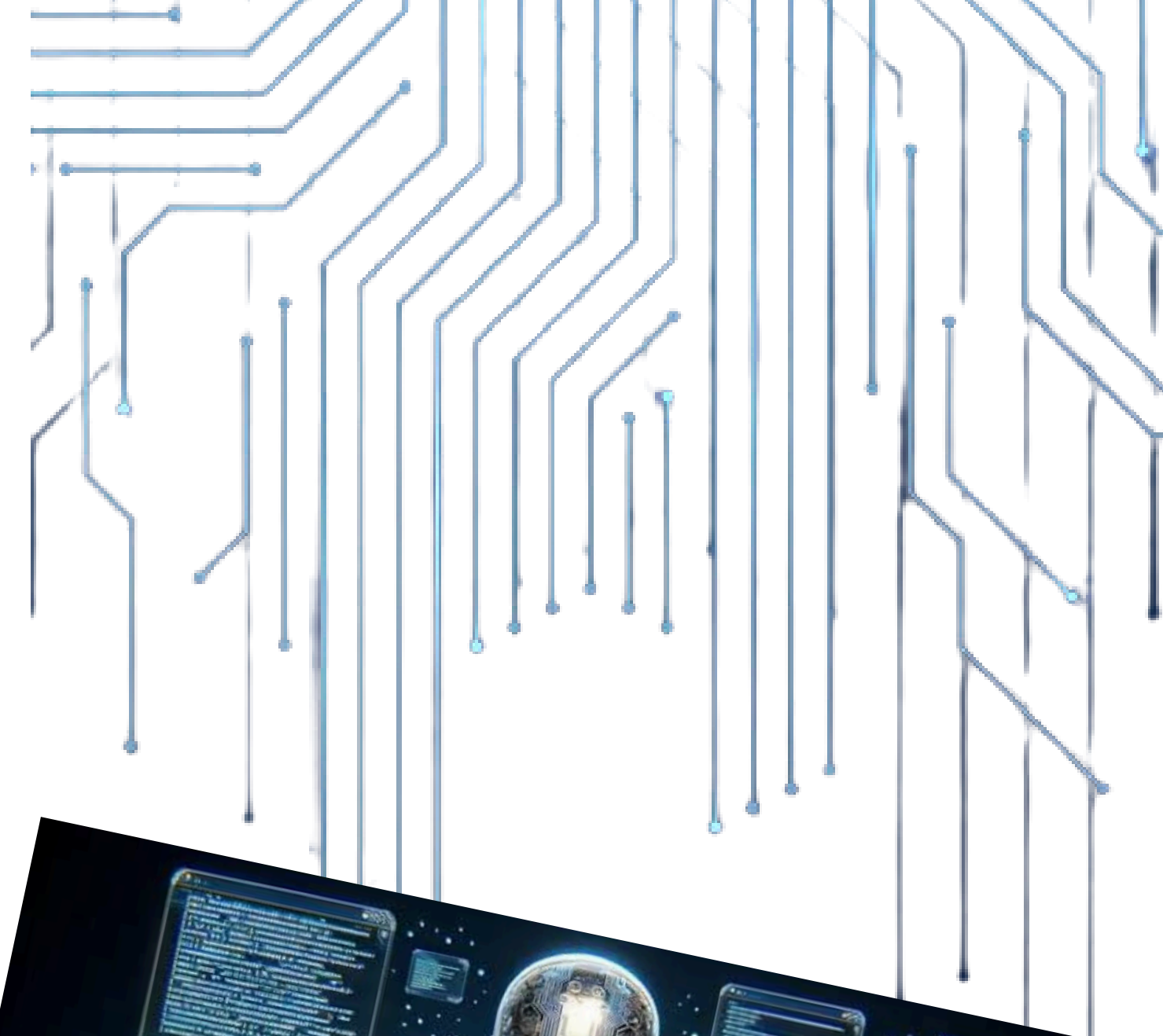
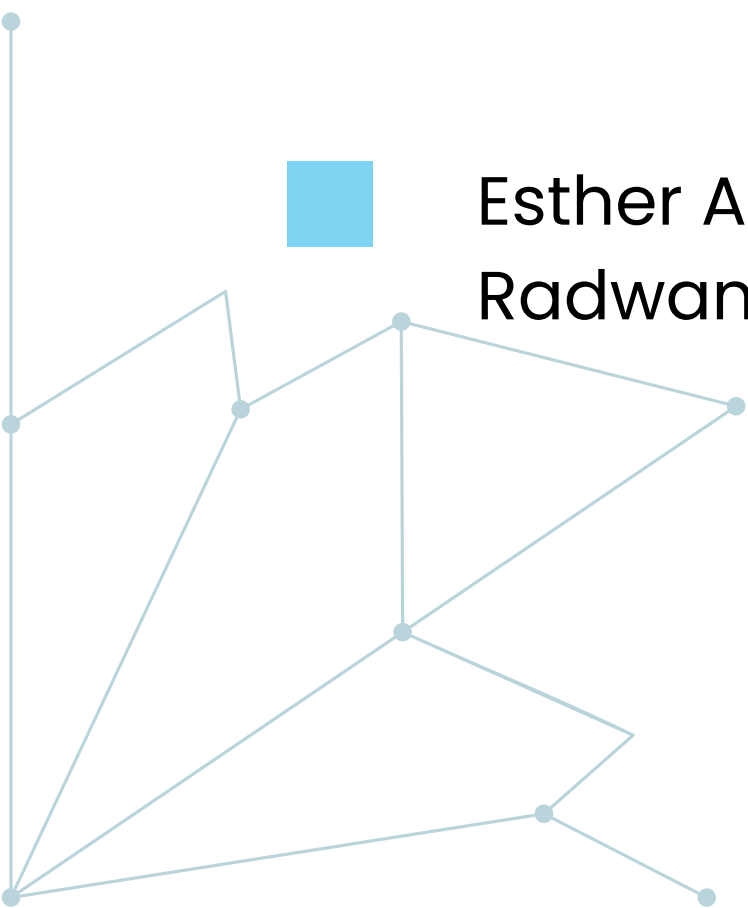
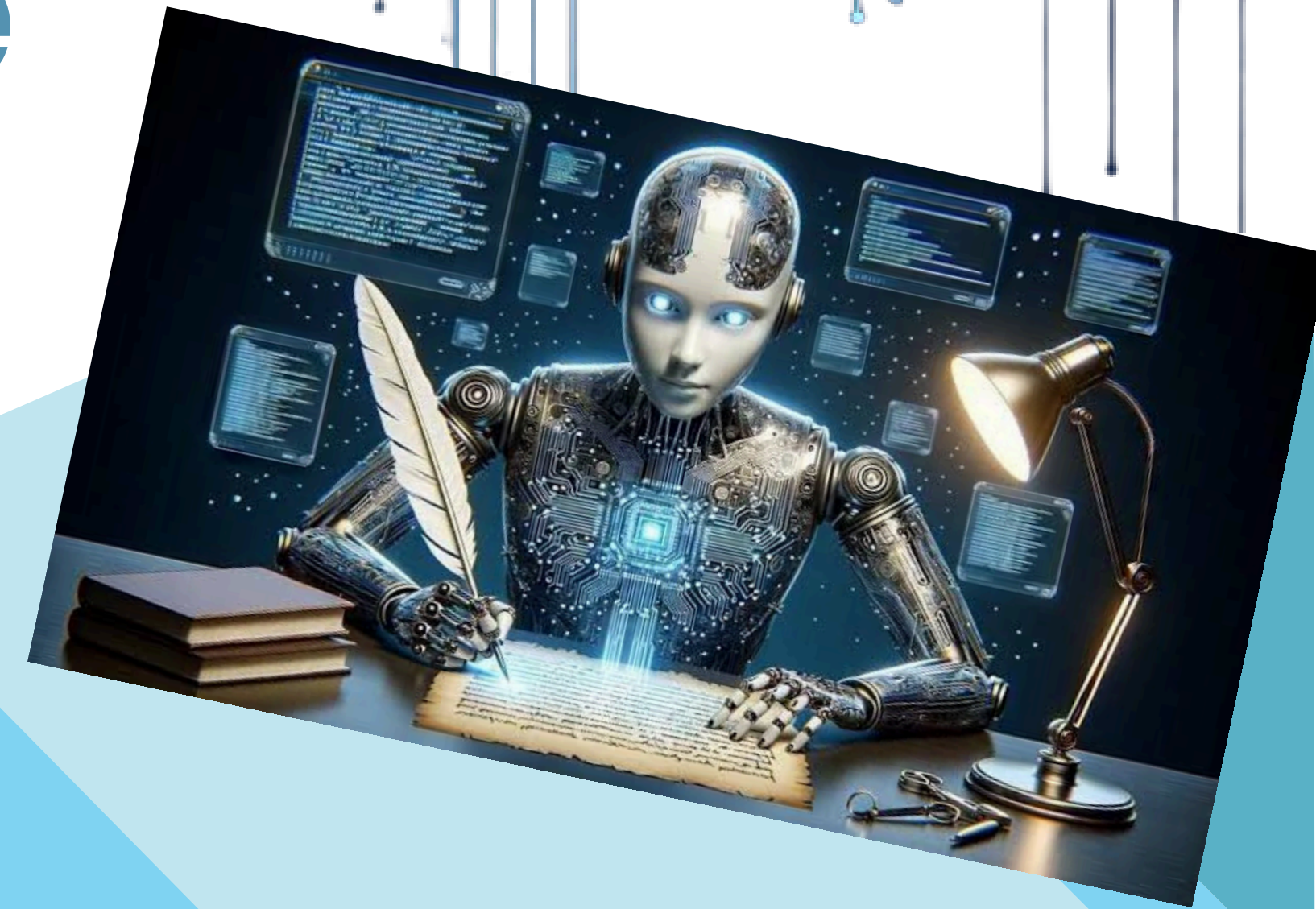


# The Broken Ladder: Is AI Automating the Path to Expertise



■ Esther Adewoyin, Catherine Gardella, Ahmed Radwan and Adam Adler



# Old Research Question

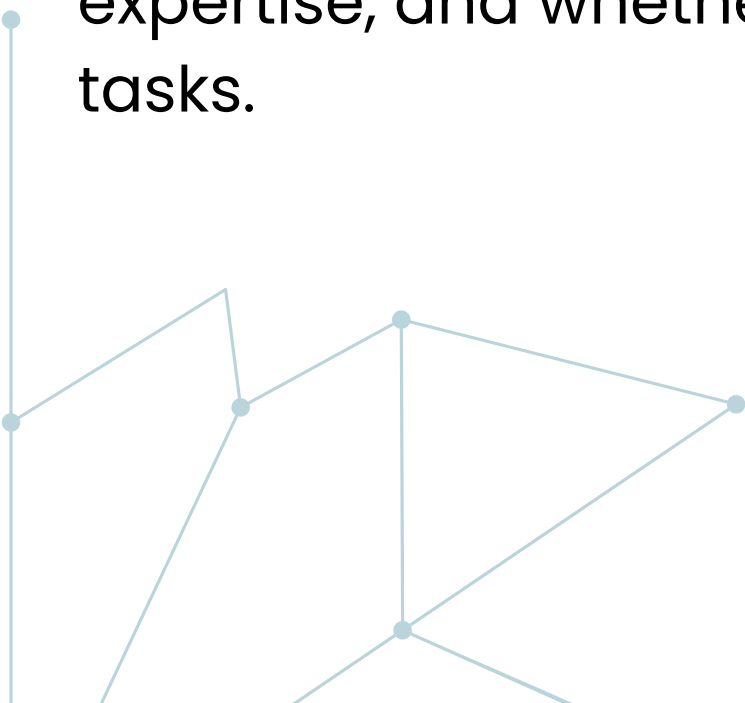
Does generative AI create new jobs or does it augment existing jobs?

# New Research Question

How is AI breaking the career ladder for Gen Z?

## Focus

Investigating the “K-Shaped” Impact of Generative AI on the Gen Z Workforce, how changes in job tasks affect expertise, and whether AI is automating away entry-level tasks.



# Insights from Professors

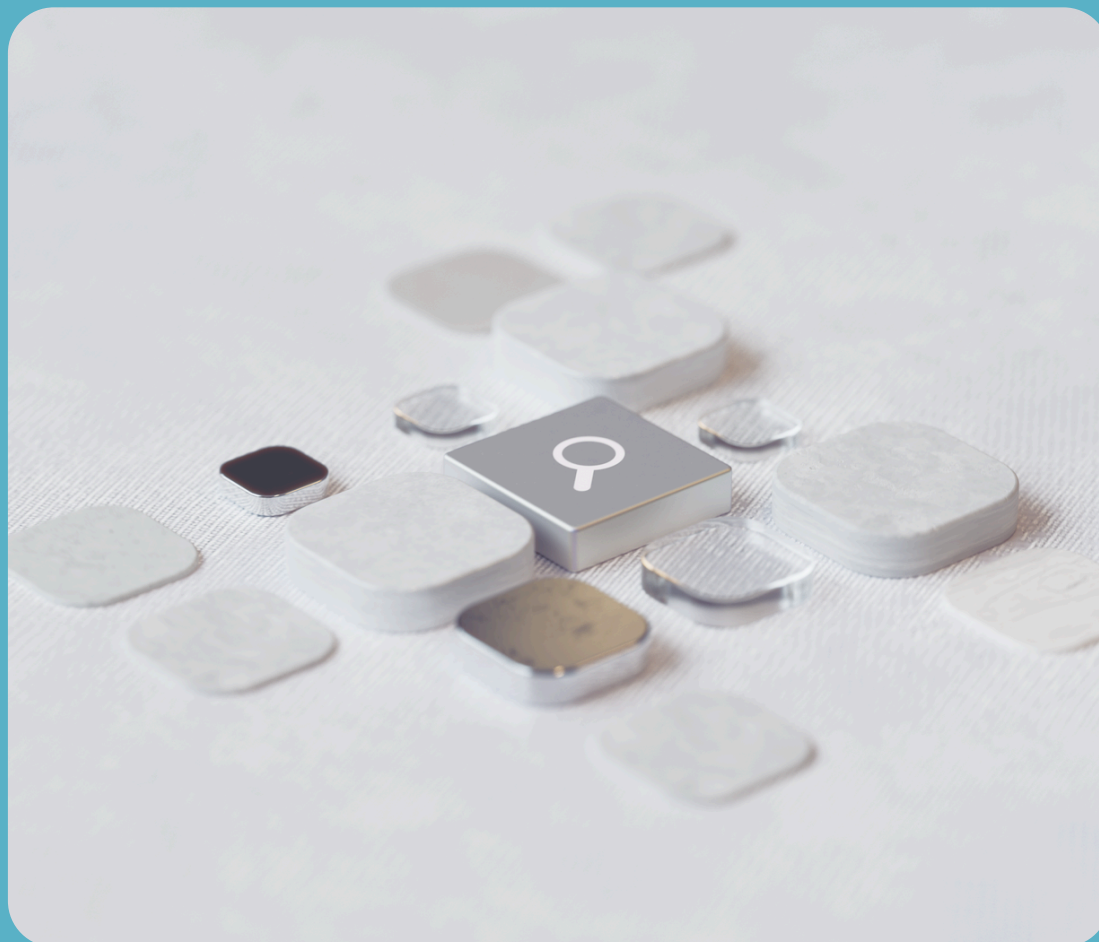


## **PAOLA CAPPELLARI**

He made an emphasis and advised to us to not focus on company based reports because they lie. He discussed how AI will not be replacing people's job due to companies trying to figure out what to do with it

## **LAUREN MULLINS**

She was able to explain to us that AI has a long way to go towards replacing humans. She claimed as long as AI does not have emotions, it would always be seen as a great tool and not a replacement



# Summary

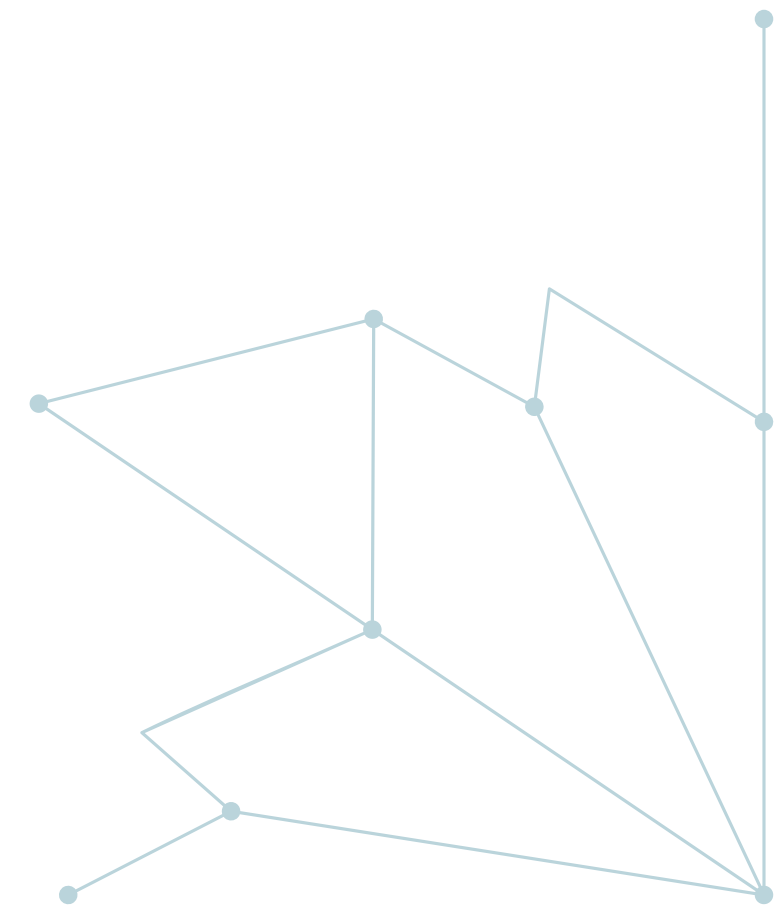
This research project explores how artificial intelligence is reshaping early career opportunities for Gen Z. Instead of eliminating all jobs, AI is changing the tasks, roles, and entry-level pathways young workers traditionally depended on to move up. As a result, Gen Z faces a shifting career ladder, where it makes it harder for younger people to gain experience because multiple fields require new skills, faster adaptation, and stronger support from employers and institutions.



# K

# The K-Shaped Polarization

The K-shaped polarization in the workforce that now involves AI now has a significant shift in the job market driven by the increasing adoption of artificial intelligence and automation technologies



# Yale Budget Lab

## Evaluating the Impact of AI on the Labor Market: Current State of Affairs (2025)

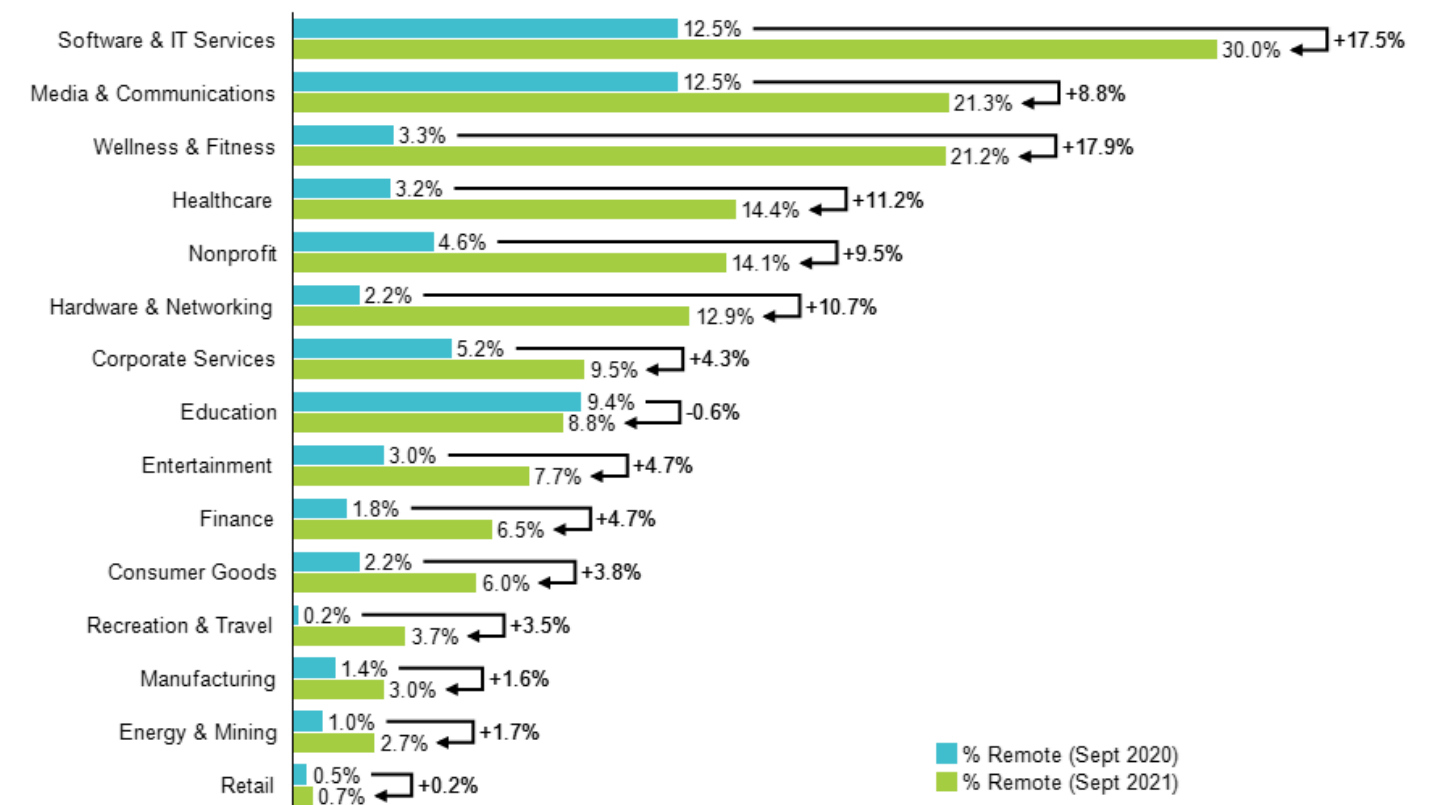
- The study provides an empirical analysis of generative AI's measurable impact on the U.S. labor market.
- Meaning: AI hasn't drastically restructured the U.S. job market.
- Most job changes = tasks, not entire roles



### Remote Work Growth



The pandemic led to a growth in remote work across most occupations. The largest growth was in software and IT services and in wellness and fitness jobs.



There was mass hiring over the pandemic for remote positions.

# Pew Research Center (2023)



- Survey of 11,000+ U.S. workers across industries and background.
- Workers in AI-exposed fields (information, administrative jobs):
- More likely to say AI will help or be neutral for their jobs; Workers in less AI-exposed fields (retail, blue-collar):
- More likely to believe AI will hurt them
- Perceptions vary strongly by industry, role, and exposure level

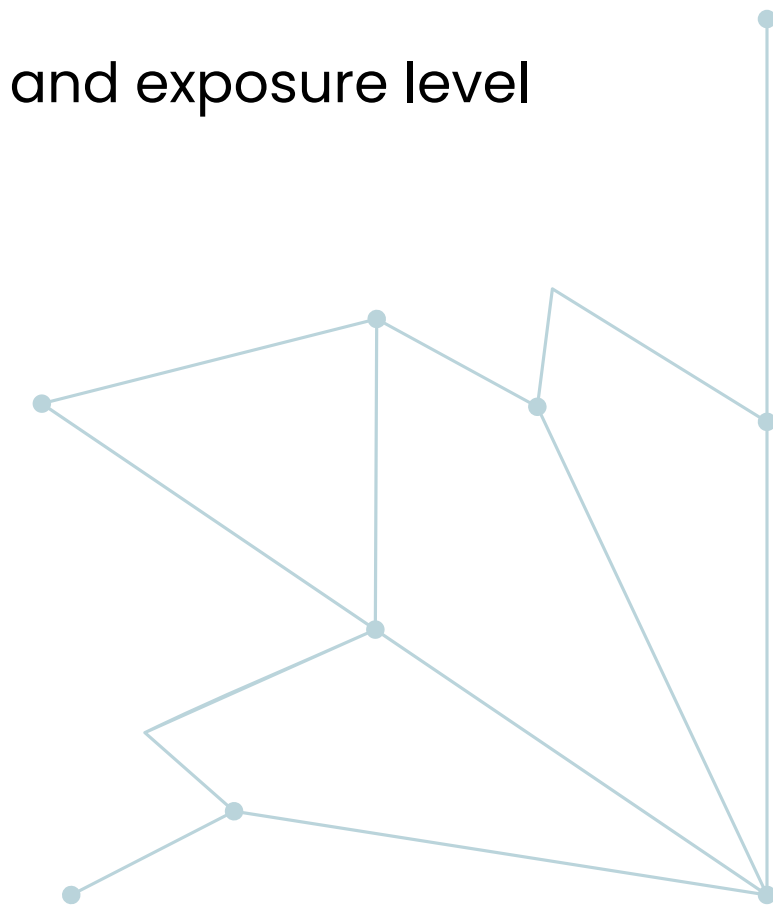
## Top 3 industries with the most exposure to AI



## Top 3 industries with the least exposure to AI



Note: Occupations are ranked by the relative importance of work activities with high or low exposure to AI. Those in the top 25% are the "most exposed" or the "least exposed," about 120 each in number. The chart shows the shares of workers in each industry employed in the most or least exposed occupations. "Other services" includes repair and maintenance, personal and laundry



# Augmentation

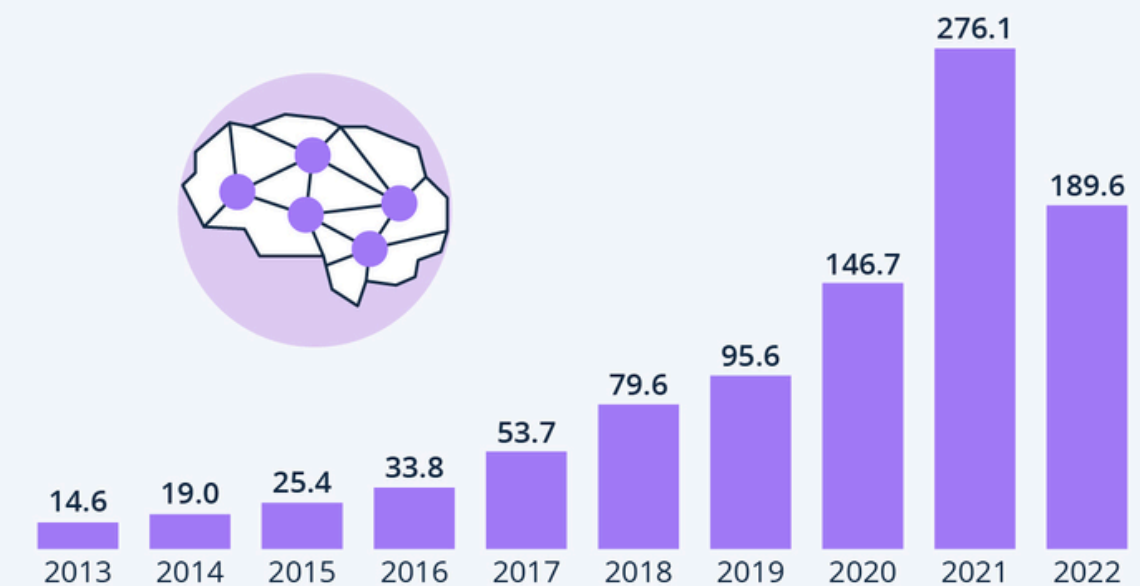
“The Upper Arm of the K”  
Highly skilled workers use AI as a tool to boost productivity, and the people already have the expertise.

# Automation

“The Lower Arm of the K” AI replaces the simple tasks that workers used to do. This creates the “broken ladder” but is not removing the whole job, it just removes fundamental tasks

## How Much Are Companies Investing in AI?

Total global corporate investment in artificial intelligence\*  
(in billion U.S. dollars)



\* Mergers/acquisitions, minority stake investments, private investments, public offerings

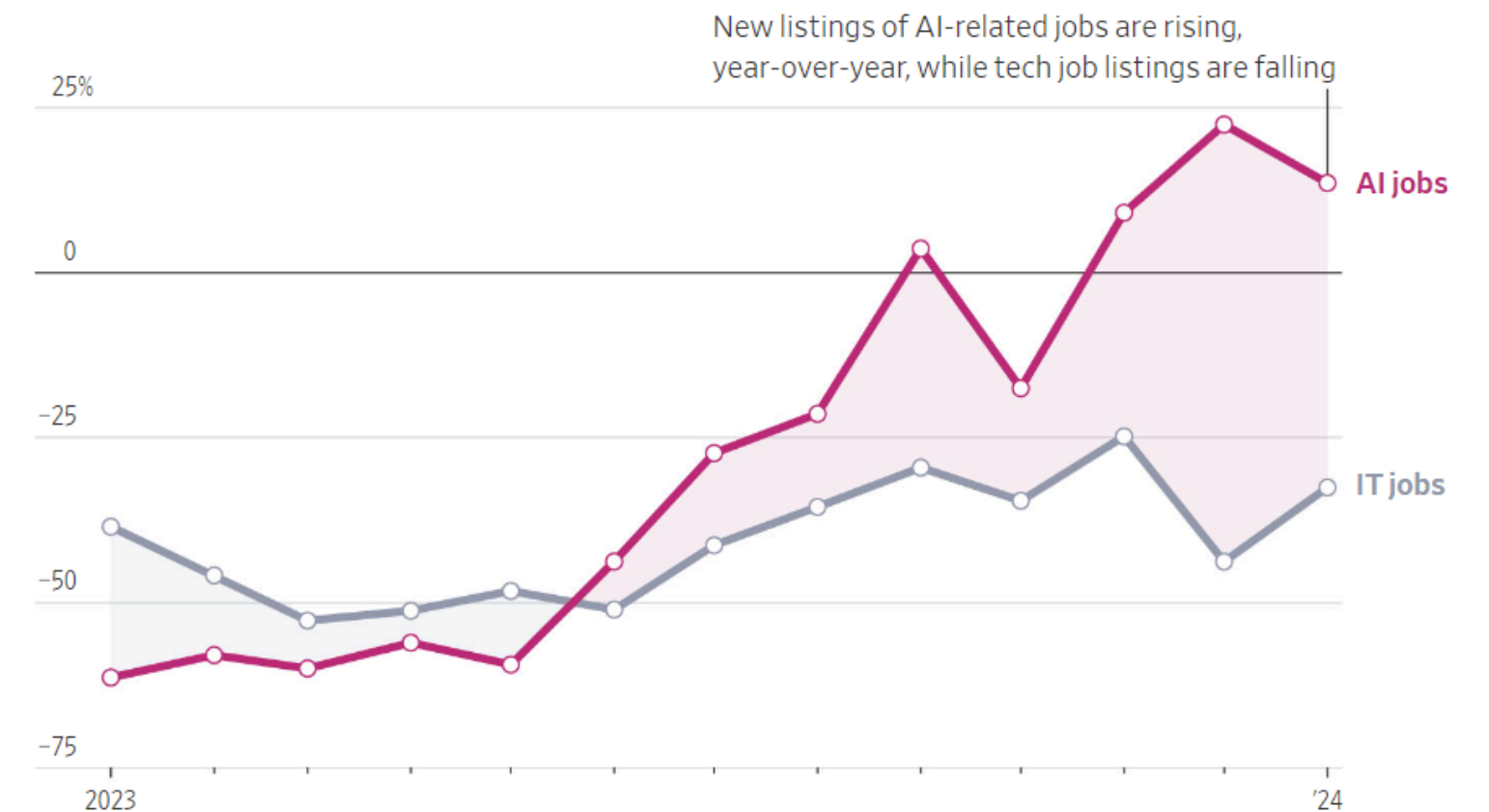
Source: Stanford University



# AI and Labor Markets: What We Know and Don't Know

- It argues that overall employment effects of AI remain small for now.
- AI exposures are poor because they do not have validation on real-world economic outcomes.
- A to call attention to large uncertainty about future effects: “we don't yet know which jobs will grow, which will disappear, or how global trends will evolve”.

Newly listed U.S. jobs, change from a year earlier



Source: UMD-LinkUp AI Maps



# Conclusion and What this means for Gen Z

- Early jobs require more technical and adaptive skills
- AI can open new opportunities if training keeps up
- The biggest risk: fewer entry-level stepping stones
- The biggest opportunity: using AI as a tool, not a replacement
- AI isn't removing all jobs, but it is changing how careers begin.
- Entry-level roles are shifting or shrinking, reshaping the traditional career ladder for Gen Z.
- Young workers now need stronger digital skills and more flexible pathways to advance.
- Support from employers, schools, and policy makers will determine whether AI becomes a barrier or an opportunity for this generation.



**“Automation does not  
replace work — it  
restructures it.”** *(Mary L. Gray)*

*Change in tasks does not equal to  
elimination of the entire job.*



**What artificial intelligence does**

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**Thank You**

