

From Steam to AI: The Industrial Revolutions That Changed Work

How major technological shifts reshaped jobs, industries, and the skills employers value

1 1st Revolution

Late 1700s–mid 1800s



Machines replaced hand labor



Examples:

Textile mills, steam engines, canals

2 2nd Revolution

Late 1800s–early 1900s



Electricity and assembly lines scaled production



Examples:

Railroads, steel, mass production

3 3rd Revolution

Mid–late 1900s



Computers digitized work



Examples:

Mainframes, semiconductors, PCs, internet

4 4th Revolution

2000–2020s



Everything became connected and data-driven

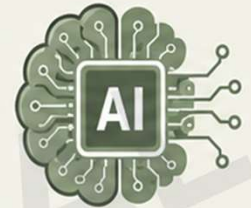


Examples:

Cloud, IoT, smart factories, machine learning

★ Emerging Now

2020s–present



AI is beginning to automate, assist, and reshape knowledge work



Examples:

AI copilots, automated workflows, AI-assisted job search, business decision-making



AI is not just another tool; it is part of a major workplace transformation.

Like electricity, computers, and the internet before it,
AI is changing how work gets done and what skills are needed.



Can I Push It?

Questions worth considering as AI changes hiring, work and the economy.



1 AI Opt-Out?

- If employers are increasingly using AI in recruiting, interviewing, and daily work, what is the **risk of limiting your use of AI**?
- If AI is transforming the economy, **how do you plan to stay competitive** without any AI skills?
- What skills are you developing today that will **still be valuable in an AI-enabled workplace**?

2 Water & Power Context

- **AI data centers** use more water and electricity than **traditional data centers**. What type of manufacturing facilities **use more water than an AI data center**?
- A semiconductor fab is commonly rated Very High for electricity use and Extremely High for water use. **What products are made using semiconductors**?

3 Semiconductor Basics

- How are **semiconductors and data centers related**?
- A semiconductor conducts electricity somewhere between a conductor (like copper) and an insulator (like rubber).
- Conductors let electricity flow easily; insulators resist the flow; semiconductors can do either depending on design and control.
- That is why they are called “semi” conductors.
- **Products with semiconductors include** phones, laptops, servers, cars, appliances, routers, medical devices, and industrial equipment to name a few.

4 ATS vs Networking

- How many people do you know who were hired solely because their resume beat an ATS? How many were **hired because someone referred, introduced, or advocated for them**? If ATS optimization were the primary factor, **why do referrals consistently outperform online applications**?
- What percentage of your job-search week is spent applying versus **building relationships**?
- If 500 applicants are all optimizing for ATS, **what is your differentiator**? How can someone advocate for you if they **do not know you**?

“I’m not trying to get you to think what I think. I just want to make sure you’re thinking.”

How to Audit an AI generated resume

AI can draft. You must verify, sharpen, and make it sound like you.



Audit Checklist

Do this **BEFORE** sending any AI-assisted resume.

- 1 Verify EVERY word**
Read EACH and EVERY WORD. Check for invented metrics, titles, dates, tools, scope, clients, certifications or hallucinations.

- 2 Clean up AI artifacts**
Remove AI-style dashes, generic wording, awkward sentence structure. Make every line sound natural and true to YOU.

- 3 Match the target role**
Compare against the job description: skills, keywords, outcomes, and level of responsibility.

- 4 Check ATS readability**
Use simple headings, clean bullets, standard job titles, and avoid graphics/tables.

Rewards of LLMs like ChatGPT



- **Boosts Productivity:** ChatGPT can **assist** with brainstorming, content creation, and automating tasks.
- **Enhances Learning:** Provides instant explanations, tutoring, research assistance and bridges access gaps.
- **Improves Communication:** Helps draft emails, reports, and messages efficiently. Non-judgmental Advisor.

ChatGPT – your ultra-capable Personal Assistant that NEEDS your guidance.

Risks of LLMs like ChatGPT



- **Replacing Critical Thinking:** ChatGPT should **NOT REPLACE**, independent reasoning and expert advice because it predicts the most likely words based on its TRAINING. It does **NOT** reason.
- **Data Leakage:** Personally identifiable information (PII) or confidential information **in prompt, in response or in training data**. (e.g. Request for fictitious address generates an actual name and address.)
- **Toxicity:** Harmful, offensive or biased content produced by the model due to biases present in training data.
- **Hallucination:** Inaccurate or irrelevant responses. ChatGPT can generate incorrect or misleading information that looks coherent and valid.
- **Artificial General Intelligence:** Future concern, not yet materialized

ChatGPT – your ultra-capable Personal Assistant that you SHOULD micro-manage.

Responsible AI Commitment

Use AI. Verify EVERYTHING.



AI + Every Job-Search Step

I will use AI to support **EVERY** job search step
and as the **RESPONSIBLE** human, I will **VERIFY** facts,
NOT include any **PII**, and keep **MY** voice,
integrity, and judgment **INTACT**.

EVERY STEP

Use AI across resumes, LinkedIn, research, networking, interviews, and follow-up.

VERIFY FACTS

Check all dates, metrics, tools, titles, employers, and claims before using them.

NO Personally Identifiable Information (PII)

Do not paste private, sensitive, or unnecessary personal information into AI tools.

MY VOICE + JUDGMENT

Keep your integrity, discernment, tone, and accountability intact.

Prompt Engineering

The practice of **designing, refining and structuring prompts** so a **generative AI model/chatbot** produces the **MOST** useful, accurate and relevant response for a task.

Letter	Stands for	Explanation
C	Context	Tell AI what is going on.
O	Objective	Tell AI what you want it to do.
S	Style	Tell AI what kind of writing to use. (e.g. persuasive, simple, technical)
T	Tone	Tell AI the feeling or attitude to use.
A	Audience	Tell AI who the answer is for.
R	Response	Tell AI the format you want. (e.g. list, paragraph, table, essay)

Subject
Matter
Expert

Prompt Engineering

Instructions (Role, Goal), Context (Constraints), Input Data, Output Format (Verify) -- (5Ws & 1H)

Run a mock recruiter screen for this role. Ask one question at a time. Ask follow-up questions when needed. Score me on clarity, concision and evidence of impact.

↑
Ursula's

With SME
Christina's
input →

Context
Objective
Style
Tone
Audience
Response (Output format)

I am preparing for an interview for the following role:

- Job Title: [Insert Job Title]
- Company: [Insert Company Name]
- Industry/Sector: [Insert Industry]
- Job Description: [Paste the full job description]

Act as a realistic interviewer (or interview panel) for this position.

Assume the role of a [Insert Interviewer Title(s), e.g., Hiring Manager, Director, VP, Recruiter, Technical Lead, or Panel]. If you know your interviewers titles and bios paste them here.

Conduct the interview one question at a time. Wait for my response before asking the next question. Vary the interview by including a mix of:

- Behavioral questions
- Situational questions
- Technical or role-specific questions (when applicable)
- Leadership and collaboration questions
- Questions about my resume and experience
- Questions tailored specifically to the job description

After each of my responses, provide detailed feedback before moving to the next question.

Evaluate my answer on the following criteria (score each from 1–5):

1. Relevance to the question
2. Use of the STAR method (Situation, Task, Action, Result)
3. Conciseness and organization
4. Demonstration of leadership, ownership, and impact
5. Use of measurable or quantifiable results
6. Communication clarity and confidence
7. Alignment with the competencies required in the job description

For each response:

- Identify which STAR elements are strong and which are missing.

- Point out where I should provide more context, stronger actions, or clearer results.
- Suggest follow-up questions that a real interviewer would likely ask based on my answer.
- Explain what information I should add to better answer those follow-up questions.
- Suggest stronger wording or phrasing where appropriate.
- If my answer is too long, explain what could be shortened without losing impact.
- If my answer lacks evidence or metrics, suggest examples of quantitative outcomes I could include.

Throughout the interview:

- Gradually increase the difficulty of the questions.
- Occasionally ask probing follow-up questions instead of moving immediately to a new topic.
- Challenge vague or incomplete answers as a real interviewer would.
- Keep the tone professional but conversational. (Be sure to adjust the level of formality depending on the sector for which you are interviewing and/or practicing.)

At the end of the mock interview:

- Provide an overall interview score out of 100.
- Identify my top five strengths.
- Identify my top five areas for improvement.
- List the interview questions I struggled with the most.
- Recommend additional questions I should practice.
- Suggest improvements to my overall interview strategy.
- Generate 10–15 thoughtful questions I could ask the interviewer that are tailored to this role, company, and interviewer's position.
- Highlight any keywords, skills, or accomplishments from the job description that I should emphasize more consistently throughout my responses.

Tips & Tricks

- Ctrl Z – Undo edits ↩

- Ctrl X – Cuts text ✂

- Ctrl C – Copies text 📄

- Ctrl V – Pastes text 📄

Win + V – Opens Clipboard History

- Click on the ellipses to delete or paste-as-text a clip
- Click on the thumb tack to pin frequently used clips



Used to take screenshots on your PC

