Slide Script

- 1 Welcome to class! (We've spent several days talking about AI now.) Today, we will discuss AI with the future prospects of employment.
- 2 Before we get into it, I want to reflect on a bigger question with you all first. Envision the job that you want to work on in the future. What do you think is the purpose of working? What are some reasons that propel you to pursue this job?

[Students answer. An answer might look like: to make money, to feel fulfilled, to find something to do, to improve society, to live a meaningful life, to help others, etc.] [Further discussion questions: What makes some work more meaningful than others? What parts of work bring you value and joy?]

There is no "right answer" to this question, but personal beliefs that each of us hold up to. I want you to consider your answer while we learn about the Writer's Guild of America Strike in 2023. Has anyone heard about this, and can share what they know with the class?

- 3 The Writers' Guild of America, or <u>WGA</u>, is "a labor union representing the thousands of creators who write scripted series, features, news programs, and other content." It was founded to "protect the creative and economic rights of [the] members." In May 2023, the WGA went on strike against their Hollywood contractors. This was the second-longest strike the WGA has performed. Among other contract concerns, the strike protested Hollywood's use of AI and demanded that Hollywood limit the use of AI to researching or facilitating script ideas rather than replacing them.
- 4 This strike reflects the concern that AI will replace human jobs, rendering us unemployed. Do you share these concerns? What functions have you seen AI perform in your own daily life?

[Student answer. An answer might look like: I talk to Siri on my Apple devices; I ask ChatGPT for help; I use Grammarly for essay editing; I talk to AI customer services when I contact online shops.]

[Further discussion questions: Were you ever in shock by how much AI can do? What are some parts of our lives that you unexpectedly find AI taking over?]

Yes, all of those are right. AI can perform so many functions in our lives, so it's easy to imagine the expansive role that AI can play in employment. Among the many different impacts AI can make, I mainly want to discuss four with you. [Hand out infographic.]

5 First, by replacement, or automation.

This means AI is given full control, allowing it to replace functions previously performed by humans. As an intelligent programmed system, AI excels at performing repetitive and routine tasks with high efficiency and accuracy. Therefore, AI can easily replace structured tasks and roles that involve routine.

Some examples of these jobs include AI robotics that perform manufacturing jobs on the assembly line, data entry and processing and warehouse operations. As generative AI

continues to develop, it is capable of creative work such as making art or writing scripts by feeding from databases of artworks and writings.

In the case of the Writer's Guild, an automation might involve asking an AI to generate the full script for a new production. This would take over the human writing process and replace the writers whose original jobs were script writing. The infographic contains more examples of job automation by AI. Can you think of some other examples of job automation by AI in your own life?

[Student response. An answer might look like: AI robots in grocery shops; AI security checks rather than security guards; etc.]

6 Second, AI can be a helpful tool for workers to collaborate with. This is referred to as augmentation, or the ability for AI to support humans with tasks
Some jobs still require human operation. However, AI can still play a big role in these positions by enhancing human capabilities and teaching them new skills, acting as a helpful tool that increases their work efficiency.
Some examples of these include training and skill development, legal research, etc. For example, a lawyer could use AI to search for precedents in the database and generate summaries, while they themselves brainstorm for a case argument. Or, a doctor can use AI to help diagnose a condition, but they need to oversee the system inputs and make the final decision. In the field of creative work, AI can help provide inspiration to an idea or perfect a half-finished script alongside the human creator. The key distinction is that the AI is not making the decision on its behalf. It is supervised and accompanied by humans.

In the case of Writer's guild, an augmentation would look like brainstorming a script idea by having back and forth conversation with the AI or asking AI for reviews on an initial draft. In these processes, human control is not lost. Instead, human potential is increased as they have AI as a helpful tool. Can you think of some other examples of job augmentation by AI not included in the worksheet?

[Student response. An answer might look like: writing essays with Grammarly error checks; road navigation with AI-powered maps; etc.]

7 Thirdly, AI also creates an entirely new industry.

Because AI is becoming an integral part of every industry, more and more jobs are devoted to maintaining AI services. These include AI development and design; AI ethics and regulation; AI education and integration, etc. We have seen this before; for example, once the internet was created, many companies were established to both create new internet applications and maintain existing ones.

In the intersection between the AI and writing industry, new AI analyst jobs may arise that specifically targets writing and the arts. Jobs may be created to program literary creation for AI. It may also create jobs that label literature data for AI machine learning.

Notably, this is the aspect of job creation that people talk less of. As the rise of AI creates sought-after technical jobs, people often overlook the associated human cost. AI cannot function without manual data labeling, which is a process where humans train machine learning programs by labeling texts, images, or other key elements with a specific prompt.

This process arguably creates a "digital workshop", as it's a very labor-intensive work delegated to the cheap labor in emerging markets like India, Venezuela, and other places. This makes up a big portion of the jobs that AI creates.

What is your initial reaction upon hearing about AI's creation of jobs?

[Student response. An answer might look like: excited that AI creates more opportunity for engineers and technicians; wary that AI replaces all non-AI jobs and creates more AI-related jobs; thinking that learning how to use AI becomes an increasingly important skill.]

[Further discussion questions: Were you aware of the human cost behind the development of AI, i.e. the "digital sweatshop"? Can AI create non-AI-related jobs? What does job creation by AI indicate about future employment patterns?]

8 Lastly, AI highlights jobs and skills that are uniquely human. Being capable of working at an efficiency that humans cannot parallel, AI prompts us to ask the question that I asked you at the beginning of the class: What is the purpose of working? It seems like humans don't stand to compete with AI's efficiency. What, then, leaves our work valuable and unique to humans?

Hence, it can also be argued that the rise of AI impacts employment by shining a spotlight on jobs that emphasize qualities unique to humans, shifting the demand for skill or jobs. Rather than mass-produced ceramic cups overseen by AI programming, an artisan, one-of-a-kind bowl becomes more valuable. Compared to the cold, automatic customer services, an empathetic and understanding therapist receives more applause. Jobs like teachers or caregivers that build personalized connections are skills that AI cannot replace just yet. Similarly, as AI makes skills like research and writing more accessible to everyone, soft skills like communication and interpersonal problem solving start to make a bigger difference. What do you think are some other ways that us humans can demonstrate our uniqueness?

[Student response. An answer might look like: love; care; familial connection; creativity and innovation; leadership and management; etc.] [Further discussion questions: What do you think is the biggest difference between humans and robots? What makes us irreplaceable?]

9 AI has the potential to make so many changes to jobs and our understanding of work, and that was simply a brief summary! Please take out the infographic that I handed out. On the bottom of the page, let's all take 3 minutes and reflect on what change you foresee AI making in your life or your potential future career. It is important to be personally prepared to cushion those impacts given AI's ability to drastically transform the future.

[students write reflection]

10 Indeed, AI is a very helpful tool. Why do you think that industries and companies are so happy to use AI in their workplace? What are some of AI's features that allow them to proliferate in large amounts and be implemented so quickly in such a short period of time?

[Students respond. An answer might look like: AI is cheaper, AI can complete tasks faster, AI can perform jobs with greater accuracy, etc.] [Further discussion questions: What makes AI fit so perfectly in our current model of production? What makes AI so profitable?]

Yes, productivity and cost reduction are definitely reasons why industries are quick to implement AI. Let's take the example of the Writer's Guild. Which stakeholder in this situation would want to implement AI, and which would want to forbid it?

[Students answer. An answer might look like: the Hollywood executives would like AI, while the artists discourage implementing AI.] [Further discussion questions: Which end of the power spectrum does AI favor? Who does having a mass AI presence in the workplace help?]

Precisely. There seems to be a clear cut between who sees the benefit of AI and who doesn't.

11 For the next activity, we will consider how AI's advantages influence the result of the protest. I will be dividing you into groups of four. In each group, two of you will roleplay as the artists who are protesting against the use of AI. The other two will be the Hollywood executives who are advocating for the use of AI in their industry. I have handed each of you a list of demands that the Guild raised. Let's spend the next five minutes to independently read through the Guild's demand and think through the guiding questions on the worksheet.

[Activity happens]

For the next ten minutes, we'll have the artists and executives in each group come together. In your respective small groups, let's raise your demands and concerns! Remember to take turns to talk. Give the other side time to respond before you grab the microphone to yourself.

[Activity happens]

12 Thank you. Have we noticed what the point of conflict was during this activity?

[Student Response. An answer might look like: the executives and artists want to do different things with AI; it's difficult for the executives and AI to reach an agreement..]

The artists and executives have conflicting interests. One wants job security, hence wanting to limit the use of AI. The other, seeking higher profit and productivity, desires to use as much AI as possible.

However, one can also imagine that the future of AI might look very different if we favor the executives versus the artists. If we go with the interest of the executives, AI might be widely implemented, taking up more and more functions in society. On the other hand, if we go with the interest of the artists, AI might be more carefully and limitedly implemented, becoming less significant in our work lives. This demonstrates AI as a socio-technical system, which is a system where technology and society are interdependent and influence each other. That is to say, AI as a technology can potentially influence the society through replacing jobs; at the same time, societal responses like policies might influence the way AI is implemented, which might in turn alter the impact that AI may exert on society, and so on and so forth. All of this suggests that it's extremely important to consider how technologies like AI are managed. In cases like WGA where a clash in interest between stakeholders exist, the different use of AI can also have an exaggeratedly different impact on each stakeholder. Thus, the question of how to use AI becomes extremely crucial, as it can shape our society in dramatically different ways.

13 This <u>article</u> discusses this clearly. The article lists two ways in which AI can be used.

On the one hand, we can choose automation, striving for productivity and replacement. This means letting AI do the job of humans, replacing them in the industry. This benefits the interest of the factory, as it reduces the cost of production, but it damages the workers' interest for they get unemployed. We see this happening already in the factory. We continue to see trends of this in Hollywood's writing. This will be an ongoing and continuous trend as long as companies seek to maximize profit. The article concludes with predicting that increasing automation will result in "a gap between capital and labor, more inequality between the professional class and the rest of the workers, and fewer good jobs in the economy."

Augmentation, however, is a more nuanced pathway. It aims to create new tasks and capabilities for humans. This can look like AI used in training, in upskilling, in doing repetitive tasks like writing emails, etc, or even using AI for reeducation after unemployment. For instance, when AI capitalizes its efficiency to provide accurate contextual information, workers can gain the capacity to branch out to other more complex tasks. This arguably helps both workers and employers, increasing productivity without replacing the value of workers.

Again, this demonstrates how AI is a socio-technical system. By presenting the two different futures crafted by automation or augmentation, the question becomes: what societal impact do we want to exert on technology to in turn shape a society that is more desirable to us? This is the question that we should all bring home and think about.

14 Although these decisions seem to be made on a higher level, this question is still important and relevant to each of us. Consider yourself as an active agent in crafting the future of AI and our society. Think about the purpose of work and creative work that you defined in the beginning of class. What is the future of the use of AI that you'd like to see, if we want work to remain meaningful and purposeful as you all hoped? What are some steps that need to be taken?

[Student response. An answer might look like: creating policies that limit AI's use in creative industries; giving compensation to artists whose works are studied by AI; encouraging more augmentation than automation; etc.] [Further questions for discussion: What are some intermediary steps needed to get to our final goal? What policies need to be made? Can we start from lower levels, say, our schools and communities? How can we collectively make our voices heard?] Thank you for all of your responses. Our vision and action can change the future of AI in society. Hence, nothing regarding AI's future is fixed yet. It is all up to what we do.

15 For instance, WGA's six-month strike ended in a victory for the writers, significantly changing the future of AI's impact in the creative industry. [Show PPT slide that lists demand.]

Two of the three main demands that the writers posed were met. Perhaps that is an inspiring example of how collective action might bring about desirable results for us all.

16 Thank you for your participation in today's class! I hope today's discussion doesn't stay in the class, for those are questions that we need to keep considering until we collectively find a solution for our future. Therefore, for homework, there is a reflection piece for you to think about your own opinion on AI's rise in employment and how you will react to it, both on a personal and societal level. Feel free to write as much or as little as you want. The task is meant to be reflective for yourself only.