Part 2: Popping The Hood on AI

The goal of these slides is to review the previous week's content and to dive into a deeper analysis of the basic mechanics of AI.

This document is designed to walk you through the content (originally split into two 90 minute sessions) and to collect notes that might be helpful as you go.

About The Tool(s)

Chat GPT is a generative artificial intelligence chatbot developed by OpenAI. Operating off a large language model (LLM), it can generate conversational responses to human queries that users can use to guide a conversation to their specific requests and prompts.

Different access tiers exist, with those paying membership fees being able to use it more frequently and with speedier replies, among other items.

Slideshow contents:

- Recap/Looking ahead
- Weekly reflections
- Popping the Hood on AI
 - o Key terms
- A Closer Look at Algorithms
- Chat GPT Activity
 - o Hand out activity guide
- The "Layers" of AI
- [Halfway Point] AI and Tech on the Street
 - o Different types
 - o Activity
- Debrief on everything that was discussed this week
- Week 2 Reflection Activity Prompts

Last time, we discussed:

- The workshop
- Our goals
- Ourselves
- A brief history of AI
- Society, Tech, Community & AI

Today will be about...

- Sharing our first weekly reflections!
- Key terms
- Close Look: How AI Works
- Activity: ChatGPT
- The "Layers" of AI
 - o [Halfway point here, if you want to break into two sessions]
- Discussion and Activity: what AI tech on the street looks like
- Upcoming reflections

Our Weekly Reflections:

• How it works (schedule)

Popping the Hood on AI

• How do computers and humans learn?

• Some Key Terms We'll Discuss

• What is an algorithm?

A Closer Look at Algorithms

• We know the definition ("A process, whether a set of instructions or calculation, that computers follow to solve a problem."), but what does it actually look like?

• EXAMPLE: SPOTIFY

• Key definitions in how AI works.

Chat GPT Activity

The activity is based around demonstrating the potential and limits of Chat GPT, as well as best practices in navigating it.

Hand out worksheets

The "Layers" of AI

• We know the definition ("A process, whether a set of instructions or calculation, that computers follow to solve a problem."), but what does it actually look like?

- The Layers are...
 - o Artificial Intelligence (The original definition)
 - o Machine Learning
 - o Deep Learning
 - o "AI"
 - o Our modern definition

[Halfway point] Last time, we...

- Shared our weekly reflections
- Looked at key terms
- Saw how AI actually works (activity)
- Any questions? Refreshers?

Today, we will look at...

- Tech in the world: what tech on the street makes a difference?
 - We already discussed the overlap of tech and AI in our phones and computers.

AI and Tech on Campus: Some Examples (in Boston)

- o Security Cameras
- o Traffic Sensors
- o DAS Antennas
- o Bike sensors
- o ShotSpotter

Activity: AI and Tech on the Street

The activity is based around examining just how many data-gathering devices are in use publicly and considering how the information it collects could potentially be used in AI.

Hand out worksheets. Please note that the map included is for Northeastern Univerity's Boston campus. You will (naturally) want to create a similar map for your uses.

Debrief and Upcoming reflections

- Debrief! A chance for you to tell us how it's going. For instance:
 - What went well this week?
 - What didn't?
 - What are you excited for?
 - What are you unsure about?

Week 2 Reflection Assignments

- 1) What are some of the advantages to have an algorithm built around your music/movie/TV tastes? Disadvantages? Is there something you wish you could change? If so, what?
- 2) What was something interesting you learned during this week's activities and how is it relevant to one of the communities you identified at the beginning of the week?