

CS 7150: Deep Learning — Summer-Full 2020 — Paul Hand

Week 1 — Preparation Questions For Class

Due: Never. This is a model for the first day of class.

Name: [Put Your Name Here]

Collaborators: [Put Your Collaborators Here]

You may consult any and all resources in answering the questions. Your goal is to have answers that are ready to be shared with the class (or on a hypothetical job interview) as written.

Directions: Watch the video ‘A DARPA Perspective on Artificial Intelligence.’

Question 1. *What do you think is the meaning of the terms perceiving, learning, abstracting, and reasoning?*

Response:

Question 2. *Provide an example of what handcrafted knowledge could be in the context of understanding audio or image.*

Response:

Question 3. *The speaker makes the point that humans can learn to identify objects when shown only one or two examples, which is in contrast to handwriting recognition algorithms which may need 50k-100k examples. What are your thoughts about this comparison?*

Response:

Question 4. *The speaker suggests that a handwriting recognition system that understands context via a handwriting model (sequential strokes of a pen) could improve classification decisions. Provide and walk through an example of a specific image where a misclassification may be made without such a model and the correct classification may be made with the model.*

Response: