CS 7150: Deep Learning — Fall 2024 — Paul Hand

Day 1 — Preparation Questions For Class
Due: Never. This is a model for the first day of class.

Names: [Put The Names Of Your Group 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. Your answers should be as concise as possible.

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

Question 1. *Provide a meaning and example of the following: 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 data.*

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 classificaiton may be made with the model.*

Response: