DSC 180 A01 - EXPLAINABLE AI DISCUSSION 5: DEEP LEARNING

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ANNOUNCEMENTS

- Checkpoint 1 submissions will be graded by Friday morning

- Instructor office hour Fridays 10-11am

- Next Wednesday is Veterans Day
  - No discussion
  - New tasks will be posted on course web site by Wednesday at noon
    - URL: http://ivl.calit2.net/wiki/index.php/DSC_Capstone2020

TASKS FOR THIS WEEK

Reading

- Read this web page up to and including section "What is Gradient-weighted Class Activation Mapping (Grad-CAM) and why would we use it?"

- Read this web page (also referenced by the article above) in its entirety, including section "Implementation of Grad Cam Using Keras". Try to follow along the coding example without actually implementing it.

Participation Assignment (due November 3rd at noon)

Answer the following questions:

- What is Grad-CAM and why would you use it?

- What information does Grad-CAM give the developer or user of a machine learning system that is not otherwise available to those users?

TASKS FOR NEXT WEEK

Reading

- Read chapters 1 and 2 of Deep Learning with Python (by François Chollet)
    - Free PDF at: http://faculty.neu.edu.cn/yury/AAI/Textbook/Deep%20Learning%20with%20Python.pdf

Participation Assignment (due November 10th at noon)

- How does deep learning differ from other machine learning techniques?

- How do neural networks learn?