



# 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 10-11 am
- 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](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>
  - <https://github.com/letspython3x/Books/blob/master/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?