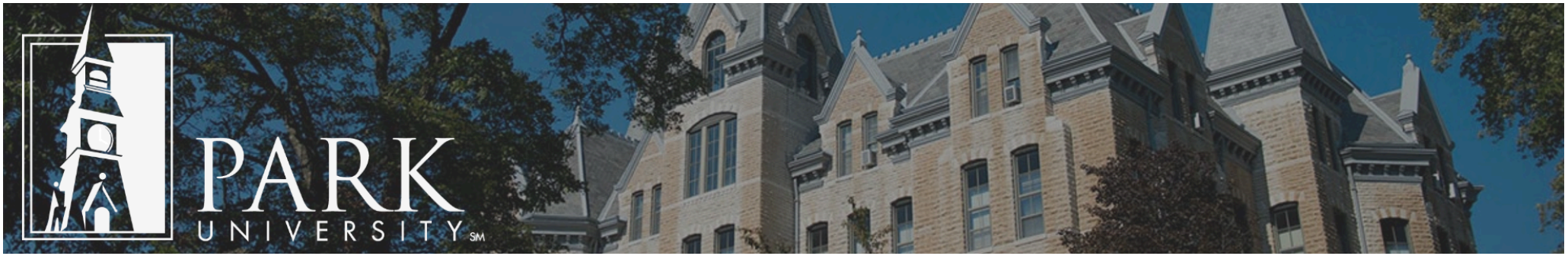
Unit 6: Overview



Neural Networks

Most often, we will leverage tools that use neural nets under the hood. After getting an understanding of how these models work, we will explore some useful tools to help out data mining.

Unit 6 Learning Objectives

After completing this module, you should be able to:

- Understand how to build a simple neural net in Python
- Understand how to use tools with neural nets under the hood

These learning objectives relate to the following course learning objectives:

- Understand available tools and their strengths
- Construct real-world models and analyses
- Identify ways to employ data mining to real-world problems

Readings and Resources

Read:

- **Website**
  - **But what is a neural network? | Chapter 1, Deep learning (https://www.youtube.com/watch?v=aircAruvnKk)**

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- **Lectures/Documents**
  - **Unit 6: Lecture: Neural Network (https://canvas.park.edu/courses/85581/files/11997423?wrap=1) (https://canvas.park.edu/courses/85581/files/11997423/download?download_frd=1)**

Complete:

- **Unit 6 Discussion**
  - Initial Post: Due Thursday, 11:59 p.m. CT.
  - In the initial post the student scholar:
    - Uses the weekly materials to construct an academic argument that addresses the discussion question in a thorough and logical manner.
    - Correctly uses key terms and concepts. Thoroughly addresses all components of the prompt. Ideas are clear and on-topic.
    - Follows grammar conventions. The writing is concise and easy to read.
    - Writes approximately 200 words
    - Please review the rubric for this assignment before beginning to ensure that you earn full credit. Contact me if you have any questions.
  - Peer Response: Respond to **2** or more classmates by 11:59 p.m., Sunday, CT.

    - Once you have posted your initial response, please respond to the postings of **two of your classmates'** initial postings. Subsequent postings can be in whatever format you prefer. To earn full credit, be sure to ask questions or additional information that furthers the discussion. Comments that are the equivalent of, "Great response, that's what I think" will not earn full credit.
- **Unit 6 Assignment**
    - Due Sunday 11:59 p.m., CT.