Capstone Three Ideas

1. Market Basket Analysis of Online Retail Purchases

* Machine learning is helping the ecommerce industry in unprecedented ways. To enhance shopping experience, product recommendations are vital. Online retail companies offer shoppers a plethora of options to choose from. With too many things to choose from, customers might not quickly find what they need. Helping customers make good choices during their shopping experience will help reduce shipping costs involved in returning items. The goal of my third capstone is to create a recommender system that helps customers find what they want from previous transactions.
  + Data Source: <https://archive.ics.uci.edu/ml/datasets/online+retail>

1. Retail Network Analysis of Online Customer Purchases

* In market basket analysis, customers are often considered independent agents when deciding on a purchase. While market basket analysis looks at individual customer purchases at a transaction level. My third capstone will predict customer purchase behaviour at a network level. My project will look at network effects that lead to a purchase. More specifically, the focus of the project will be discover how customers who do not know each other in reality are similar in their purchase patterns.
  + Data Source: <https://www.kaggle.com/andrewlucci/huawei-social-network-data>

1. Sentiment Analysis of Online retail purchases
   * Product reviews are a great way for a business to get feedback on how its products or services are doing. Although product reviews reveal what customers think of a product, these opinions barely scratch the surface of feedback. Using advances in natural language processing, my project will focus extracting valuable insights from customer reviews. The goal of the project is to uncover what customers care about and how customers use the product or service.
     + Data Source: https://www.kaggle.com/bittlingmayer/amazonreviews