**Project Proposal**

Image processing for the apparel and fashion industry

**Problem:**

Be able to identify images of clothing items from targeted social media sites.

**Who is your client and why do they care about this problem? In other words, what**

**will your client DO or DECIDE based on your analysis that they wouldn’t have**

**otherwise**?

An apparel/fashion company wanting to start a new marketing campaign targeting users of social media such as Pinterest and Instagram.

People who post a lot of apparel pictures to **Pinterest or Instagram** may be planning a purchase or an event like a vacation. By identifying these images, the apparel/fashion company can develop:

* Models that can identify what makes a *blue blouse,* can use the information to recommend products that are visually similar.
* Understanding a person’s style in clothing can also help target them for related products.
* A following on these social media sites.

Also identify people who are following specific sites or people on Pinterest and Instagram that focus on apparel, can be potential customers.

**What data are you going to use for this? How will you acquire this data?**

The data used for this project will be public data from Kaggle. It consists of training data and test data.

<https://www.kaggle.com/zalando-research/fashionmnist>

**In brief, outline your approach to solving this problem (knowing that you may not**

**know everything in advance and this might change later). This might include:**

a. Is this a supervised or unsupervised problem? Supervised

b. If supervised is it a classification or regression problem? Classification

c. What variable is it you are trying to predict? Clothing item

d. What variables will you use as predictors? Image matrix

e. What will be your training data? Yes, Fashion mnist

**What are your deliverables? Typically, this would include code, along with a paper**

**and/or a slide deck.**

Code

Slide deck