1. Python API

Use python to build an API to get the price of Bitcoin using package over the latest 30 days. Visualize the candle-stick plot, representing the open, close, min, max price of each day.

1. Python Webscraping

Use HTTP Request, including GET, POST, PUT, DELETE to scrape text from websites. Then transfer them into dataframe using pandas.

1. Image Classification

Use IBM Waston Viusal Recognition to do image classification. Given a series of image, using general model to identity the characteristics that exist in the image. For example, given an image of a jacket, we identity the colour and the style of the jacket.

Waston:

Given two sets of pictures, we can use them to train the model.

Then we can test on picture.

1. Paint with AI

Learn a new kind of neural network, called a generative adversarial network(GAN) to create complex outputs, like photorealistic images. Use a GAN to enhance xisting iamges and create my own unique, custom image.

1. Computer Vision

Use IBM’s Adversarial Robustness Toolbox to mitigate simulated attacks by hackers