* Lack of info on the internet about pytesseract
  + Python-tesseract is a wrapper for Google’s Tesseract-OCR Engine.
* Install PIL - Python Imaging Library
  + Pillow is the friendly PIL fork
  + PIL and Pillow can not
  + Pillow and PIL cannot co-exist in the same environment.
* Python PIP - If you have Python version 3.4 or later, PIP is included by default.
* Error 0x80070643: Failed to uninstall MSI package.

Error 0x80070643: Failed to configure per-user MSI package.

* Fixed errors with a simple reinstall and reboot.
* python: list all packages installed… help("modules")
* Install NumPy-
  + NumPy is a library for the Python programming language, adding support for large, multi-dimensional arrays and matrices, along with a large collection of high-level mathematical functions to operate on these arrays.
* Install CV2 - OpenCV on Wheels
  + Unofficial pre-built OpenCV packages for Python.
* Install pytesseract
* Install PyAutoGUI – don’t need
  + Cross-platform GUI automation for human beings.
* Install Tesseract -
  + The Mannheim University Library (UB Mannheim) uses Tesseract to perform OCR of historical German newspapers
  + Normally we they use Tesseract on Debian GNU Linux, but there was also the need for a Windows version. That's why they have built a Tesseract installer for Windows.
  + Developed by google in since 2006
  + The **Tesseract engine** was originally developed as proprietary software at **Hewlett Packard** labs in **Bristol, England** and **Greeley, Colorado** between **1985 and 1994**, with some more changes made in 1996 to port to Windows, and some migration from C to C++ in 1998.
* Comment - hey why use a pixel/image bot? why not learn memory injection? I heard its more reliable﻿
  + Response - I was aiming for doing it as a human does rather than messing with instructions, you're right though that could potentially be a lot better, but the bot was more a learning exercise than anything else﻿
* virtual environment (highly recommend so that you can separate different projects)
* Found detailed tutorial on how to get pytesseract to work. Ideally, leaning how pytesseract works and learning how to use it first will make fixing the receipt scanner in python easier.
  + <https://www.pyimagesearch.com/2017/07/10/using-tesseract-ocr-python/>
* Lessons Learned in Blog/Tutorial
  + reduce salt and pepper noise
  + pre-processing methods
  + command line arguments
* Tesseract, it was initially developed by HP in the 80s and 90s.Recently Google picked up development and improved it a lot.
* Using Tesseract on Mac:
  + brew install tesseract --all-languages
  + tesseract -l deu /Users/gregfinnegan/Desktop/example1.png output
* Using pytesseract
  + /anaconda3/bin/python /Users/gregfinnegan/Desktop/ocr.py --image ///Users/gregfinnegan/Desktop/example1.png
* There were over 100 different issues
* /anaconda3/bin/python "/Users/gregfinnegan/Desktop/OCR MAC VERSION 1 /ocr.py"