

## Contributions Outside GitHub

Team name: PyHandlers

*Comment(s):* Phase(s) coincide with peer reviews

Phase(s)*	Contributor(s)	Description
1 - 4	All	Nearly 100% attendance at regularly scheduled team meetings on Mondays at noon and Thursdays at 8 p.m.
1	Tyler	Preliminary research re: cloud computing, Google Earth integration generally; Google Earth Pro Desktop API, Google Earth (web) API.
1	All	Preliminary research re: frameworks and tools (e.g., TensorFlow vs. Keras vs. PyTorch) and hand gesture recognition approaches.
1	Ying, John	Preliminary research re: computer vision and OpenCV.
1	John	Team planning tools (i.e., Trello versus Teams).
1	Grant	Preliminary research re: deep learning theory.
1	John	Evaluate Anaconda/Jupyter environment.
1	John, Grant	Test/deploy skeleton code to build image library, generate deep learning model, OpenCV video capture, and hand gesture prediction. John's deployed on Anaconda/Jupyter notebook, and then placed in GitHub to serve as initial framework.
1-2	John	Preliminary evaluation of PyQt. Evaluate Django as alternative for Web application with web-based Google Earth if issues arise with Google Earth Pro Desktop
2-3	John	Research/test work-around for incompatibility between pydirectinput library and Linux.
2-4	Ying	Develop and test various coding methods for enhancing OpenCV video/image capturing.
2	Ying	Develop PowerPoint template for Midterm Presentation.
2	Ying	Develop graphics image for Midterm Presentation slide show.
2	All	Compose text for MidTerm Presentation slide show.
2	All	Test skeleton framework in WSL vs. Virtual Box vs. Ubuntu Distro.
2	Grant	Setup PyPi page. Package Vertical Slice.
2	Vanessa	Compose README text and images for Vertical Slice submission.
2-4	Ying, John	Experiment with different hand gestures, backgrounds for optimized environments.
3	Ying	Develop stand-alone code to enhance image-capturing process and train models (mentioned here because training occurs outside GitHub).
3	Ying	Develop stand-alone code to create collaborative environment where multiple users can add images to shared repository without inadvertently overwriting image files (mentioned here because image capturing initially occurs outside GitHub).

3-4	All	Train model with new image captures (over 26,000 captured images with various backgrounds).
4	Grant	Develop and test code for removing background from OpenCV image capturing.
4	Grant	Package Production Release
4	All	Prepare Post-Mortem Presentation