

ACTIVITY-BASED SCHEDULE			
Copy-Waste			
Project Name	Copy Waste		
Activity	Duration	Start Date	End Date
Project Initialization, structuring project management, begin documentation, envision project objectives	15	Sept 17 th	Oct 1 st
Research the waste management community, technological ability of users, continue documentation	32	Oct. 1 st	Nov. 1 th
Start designing the architecture for the dashboard, universal bin detector, and the automated data augmentation pipeline. This includes any required low and high fidelity prototyping and establishing data structures	15	Oct. 10 th	Oct. 24 th
Implement the dashboard in React. Annotate images for the various categories the universal bin detector requires and train a detection model in YOLO	45	Oct. 18 th	Dec. 1 st
Deploy the universal bin detector to various municipalities and monitor performance	12	Dec 30 th	Jan 10 th
Begin Developing the Copy-Paste data augmentation pipeline. Build MVP 1 which augments objects from one image into another image	16	Jan 5 th	Jan 20 th
Implement MVP 2 which includes various transformations when objects are placed. Including rotation, resizing, and placement	19	Jan 20 th	Feb 7 th

Audit 90,000 image annotations with the dataset to prepare for scaling up the data augmentation pipeline Implement MVP 3 which augments an object into a small dataset of 3 to 5 images.	9	Feb 7 th	Feb 15 th
Implement MVP 4 which layers objects from the original image with the new objects being placed. Dashboard User Testing	13	Feb 15 th	Feb 27 th
Implement MVP 5 which adds the ability to scale up our data augmentation to produce a large dataset	15	Feb 27 th	March 14 th
Implement MVP 6 which sends the produced dataset to Mask R-CNN Training Service on AWS	18	March 14 th	April 1 st
Complete Project Closing Documentation, Commercial, Poster, and prepare for project day	9	April 1 st	April 9 th

*****Subject to change*****