

Team Copy-Waste
Nolan Flegel, Rishabh Prasad, William Peers
Team / Instructor Scrum - 1
Sept.10, 2021 - Sept. 24, 2021

Team Member Roles:

- Nolan Flegel - Machine Learning Lead
- Rishabh Prasad - Front-End Services Lead
- William Peers - Back-End Services Lead

Business Needs:

- Events such as propane tanks in waste bins are rare, however important to detect as they can pose immediate risks to employees and the public.

Opportunity / Innovation:

- Traditional machine learning requires a large volume of annotated images to train detection models. It is difficult or nearly impossible to obtain datasets for rare object occurrences.
- Using state of the art algorithms we will attempt to artificially create annotated image datasets for rare objects and use this data to train detection models.

Status: Green

- We are gathering requirements extensively, meeting often, and recording meeting minutes with our scheduled weekly sprints

Individual Contributions:

- Nolan - Research, Mitacs, Documentation, Gave Presentation on State of GIS
- Rishabh - Research, Github Setup, Documentation, Presentations
- Will - Research, Project Setup, Documentation

Project Issues / Changes:

- No issues or changes at this time

Documentation and Overview:

- Stakeholders Analysis / Management, Project Charter, Project Scope, Business Case documents are all in progress
- Github Project Architecture is setup
- Trello board for managing the project is active
- Mitacs Proposal is being finalized

Next Up:

- **Team**
 - Meetings planned with our Advisors and with Prairie Robotics
 - Submitting Mitacs Proposal
 - Completing remaining project startup documentation
- **Nolan**
 - Researching algorithms and evaluating their performance
 - Tutorials to familiarize with the technologies.
- **Rishabh**
 - Researching Valuable Metrics of Recycling Analysis
 - Setting up front-end architecture and becoming familiar with React
- **Will**
 - Researching algorithms and evaluating their performance
 - Tutorials to familiarize with the technologies.

Team Reflection:

- **Does the team feel "on track"?**
 - We believe we are still on track based on our planning and meetings
- **What progress does the team particularly feel good (great) about?**
 - We feel good about our extensive requirements gathering phase and research, exploring technologies, and our plans of action moving forward
- **What barriers (if any) does the team feel are a current impediment to success?**
 - We do not have any barriers to success at this time
- **What help (if any) does the team require to move positively forward?**
 - Moving forward we will require some more guidance from our advisors which we will receive throughout our upcoming meetings
- **What questions or concerns does the team have (if any)?**
 - No questions at this time