



Machine Learning Tool for Photo Analysis

Paid internship(s) after the Field Session may be offered to students that perform well. These could extend into the school year, and after graduation may turn into full-time positions.

Client

Jeff Beyle, CEO of Sticker Control – www.StickerControl.com jbeyle@stickercontrol.com

Company Background

The Sticker Control software system helps small and mid-size manufacturers and distributors use IoT sensors (RFID, barcodes, GPS, and more), digital forms, and AI-driven models and algorithms to:

- Automate manual processes
- Eliminate paper and spreadsheets, and make data accessible where it is needed, when it is needed, at all levels of the organization
- Improve operational visibility, including ensuring activities are performed on time, every time and exceptions are flagged in real-time
- Optimize operations and eliminate surprises regarding the location, condition, and stocks of assets

We help companies gain the benefits of advanced technologies without needing large company resources.

Easy to adopt. Straightforward to use.

Description of the Project

Our customer (ReCircled www.ReCircled.com) is working with us to help apparel and footwear brands divert used / not quite right items from the path of going to the landfill or being incinerated. They use our system:

- To receive used apparel / footwear from consumers, brand distribution centers, and retail stores
- To assess the items and put them onto one of two paths -- recycle or repair/clean/resell
- With resell items, they manually capture data about those items -- brand, style, color, size, gender, etc.
- The resell items are photographed and then these photos are uploaded to a re-commerce site. You as a consumer can buy a used pair of boots (or whatever), but not just a used pair of a certain style of boots. You see photos of the actual boots you will buy.
- Our system manages the inventory, tells the ReCircled team when an order has been placed, and where that item is in the warehouse so the ReCircled team can fulfill the order.



This project would involve building a machine learning tool that could use a photo of a used item to detect the product SKU (so we can associate the product description and other metadata with the item automatically) as well as the item's color, size and potentially more. This will help the ReCircled team operate more efficiently.

Suggested Team Size and Location

3 – 5 students. Work can be done from CSM campus or from home/any other location.

Skills/Experience

We use the following technology:

- C##
- .Net Core
- VUE
- GIT
- JavaScript
- CSS / Tailwind CSS
- Azure

We will use Google ML tools for this project.

We understand not all the students in the group will have the desired technical skills. If the students can problem solve and have a willingness to learn, we will work with them to ensure that that they do well on this project.

Notes:

- All intellectual property developed as part of this project will be owned by Sticker Control.
- We will ask students to sign a non-disclosure agreement (it will not be onerous or particularly long).