Sticker Control

Machine Learning Tool for Photo Analysis

Paid internship(s) after the Field Session may be offered to students. 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

We have several customers that are working with to divert used items (apparel, footwear and more) from the path of going to the landfill or being incinerated. They use our system:

- To receive used items 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, SKU, and other data consumers view when deciding on purchasing a new version of the item.

- The resell items are photographed and then these photos are uploaded to a re-commerce site (one we host or one operated by the brand but supported by us). You as a consumer can buy a used pair of boots (or whatever) and can see photos of the actual boots you will buy.

- Our system manages the inventory, tells our customers when an order has been placed, and where that item is in the warehouse so our customer can fulfill the order.

In a field session with School of Mines students in May / June 2022, the team built out the initial version of a visual recognition machine learning tool. This tool uses a photo of a used item (at this point only footwear) to detect the product SKU (so we can associate the product description and other metadata with the item automatically).

This phase of the project will build upon the first team's success (i) to allow the tool to work with different types of assets, and (ii) to build out some system administrative tools.

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 AI 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).