A Data Science Company


## Case Study

## Channel and Rebar Counting for a Steel Manufacturer in Canaḍa

## About the Client

## Business Problem

A major steel company in Canada was looking for a computer vision based solution to count channels, rebar post stacking them in the bundle. They had a mobile app and wanted to integrate the computer vision based solution. Before dispatching the Channels and Rebars, they wanted take a picture from the mobile app and do an automated counting as a double check.

## Solution

We developed a solution using Deep Learning and Computer vision models to automatically count channels and rebar from the image. The end user would take picture of the stacked rebars \& channels using the mobile app. The app would then invoke the AI Models deployed on the cloud. The AI model would process the image and detects channels \& rebars in the image and return back the count and an annotated image. The mobile app had an option to manually annotate the objects which were not counted. This solution worked at very high accuracy of more than $95 \%$ and helped to uncover inconsistencies in object count between different stages of manufacturing

## Outcome

The Client was able to automate the error prone human object counting process which resulted into delivery of correct quantity to their end client. It improved the accurate delivery to the end client

## Technology Used

Python, Tensor Flow, Deep Learning, Object Detection, Object Counting, Classification, Django, RESTful APIs

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## Office Locations

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