

# <u>Problem</u>: Automate *re-sizing*, *re-naming* and *path tracing* (around region of interest ) tasks on images.

#### Situation

- ORS Nasco(Client)
  expects us to re-size, re name and extract the
  product image without
  any background around
  it such that they could
  place it in any
  background they want
- There are around 15000 images of Gatorade and Kimberly Clark given by ORS Nasco(Client)
- Re-naming, re-sizing and path tracing can be done manually using Adobe Photo shop by a Photo Shop designer
- Automation is another option which can save a lot of time and money

#### Complications

- Processing 15000 images manually is tedious
- Perfect path tracing is highly difficult to achieve
- For highly complex images, automating tracing task almost impossible.

#### **Key Questions**

- Can the python script works as accurate as a photo shop designer?
- Is there any algorithm which doesn't need manual intervention and can give more accurate results than the grab cut algorithm?
- Can automation in all three tasks meets client's requirements?

#### **End State**

Automation of all three tasks with high accuracy



## Accurate example





## Accurate example





#### Accurate example





# Accurate examples





#### Partially accurate examples





# Complex images (In accurate)





#### **Statistics (On Sample Images):**

- Total Images = 101
- Total Time Taken = 5000 seconds-Approx(83.3 minutes)
- Perfectly accurate = 76.23%
- Inaccurate = 23.76%

