

# Food Recognition

Identifying the vegan trend through  
food recognition in images of food  
posted on [foodspotting.com](https://www.foodspotting.com)

# Goals – 2 fold

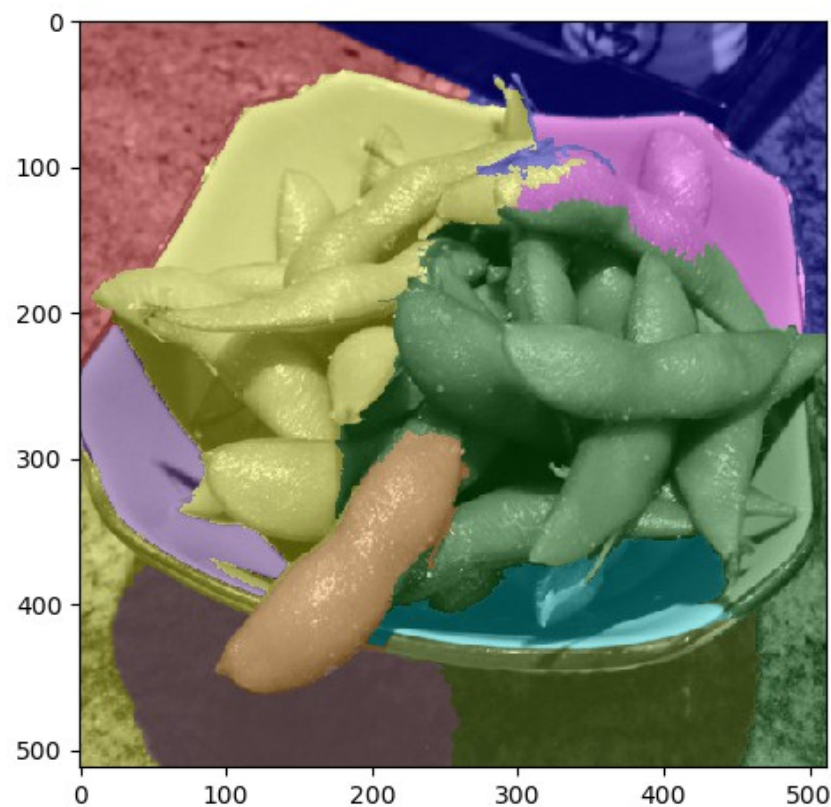
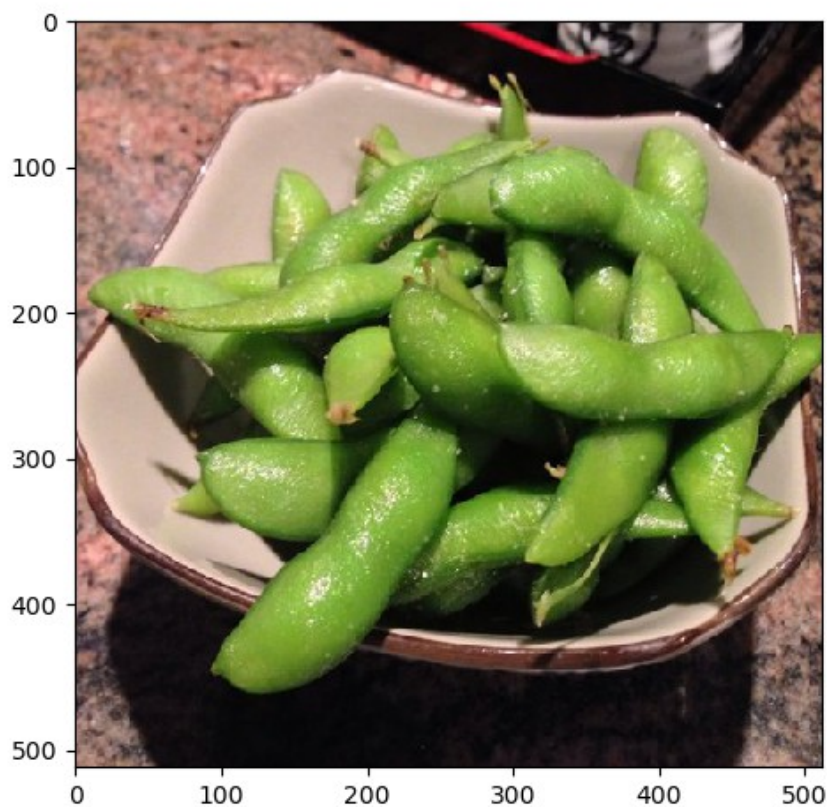
- Is the food in an image vegan?
  - Use: - Vegan food recognition app.
- Has interest in vegan food increased?
  - Compare recently posted images against older ones
    - Use: - Trend tracking (e.g., for health sector, environment and agriculture activists, as well as restaurateurs)

# Overview

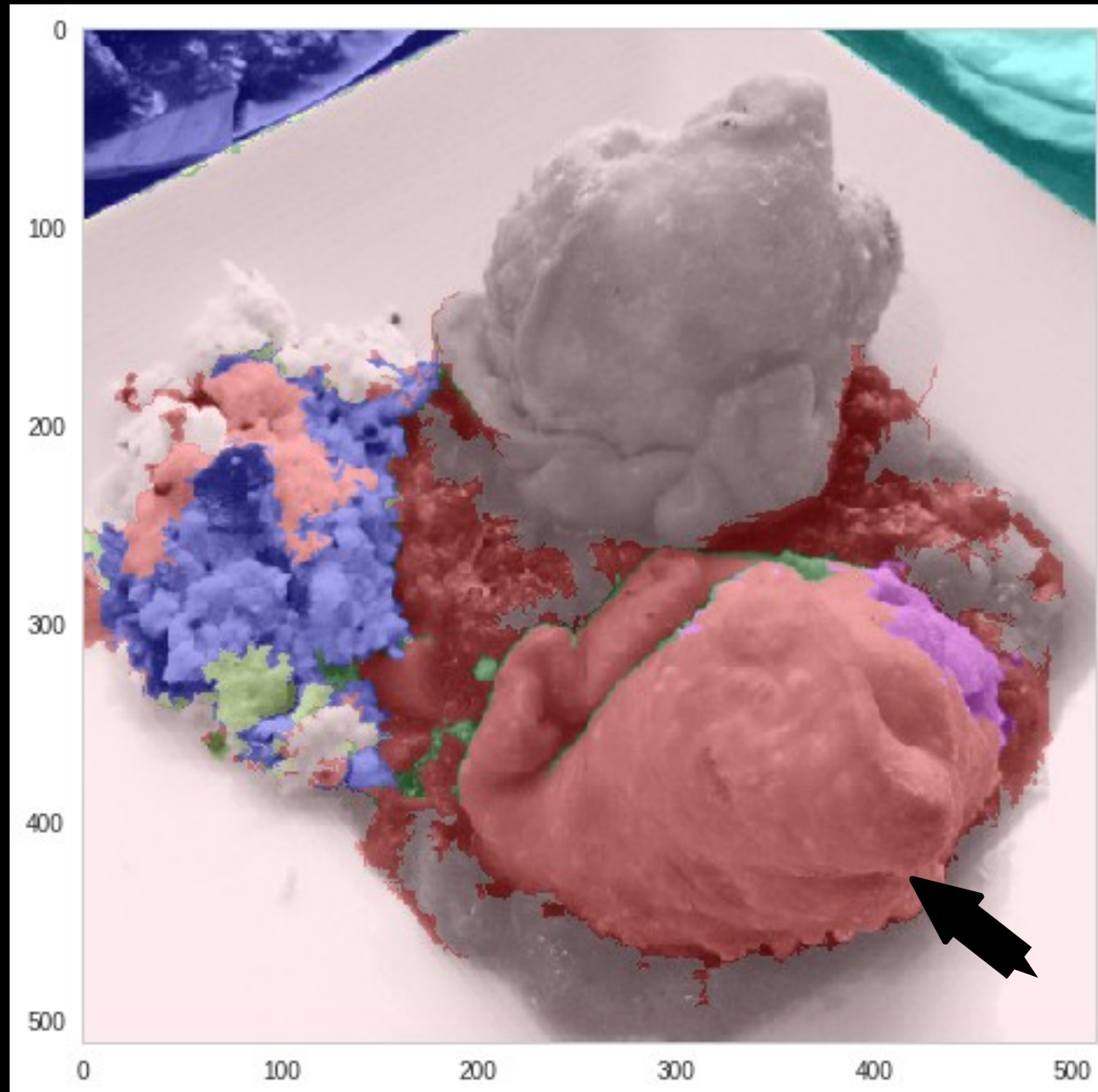
- **Data** – Food 101 data set
  - 101000 images previously trained and tested on 101 classes (e.g. dumplings, fries, Boussard et al 2014)
- **Defining** the Vegan class (or super-class)
  - Multiple classes will fall under the 'vegan' label.
- **Features** for training = image features from within superpixels
- **Random Forests** for classification

# What do superpixels look like?

Marked with different colors in image on right

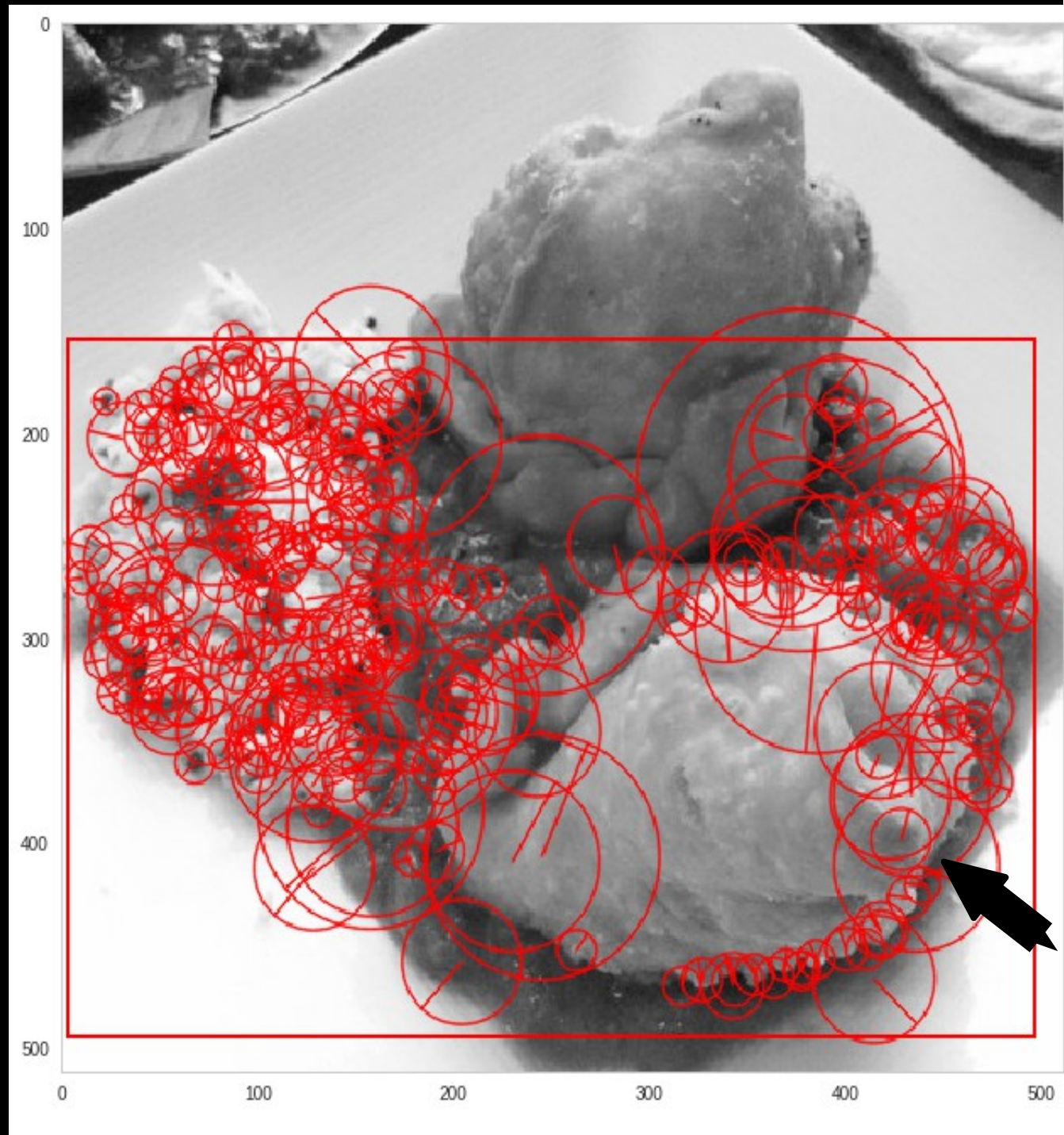


# New Segmentation (Superpixels)

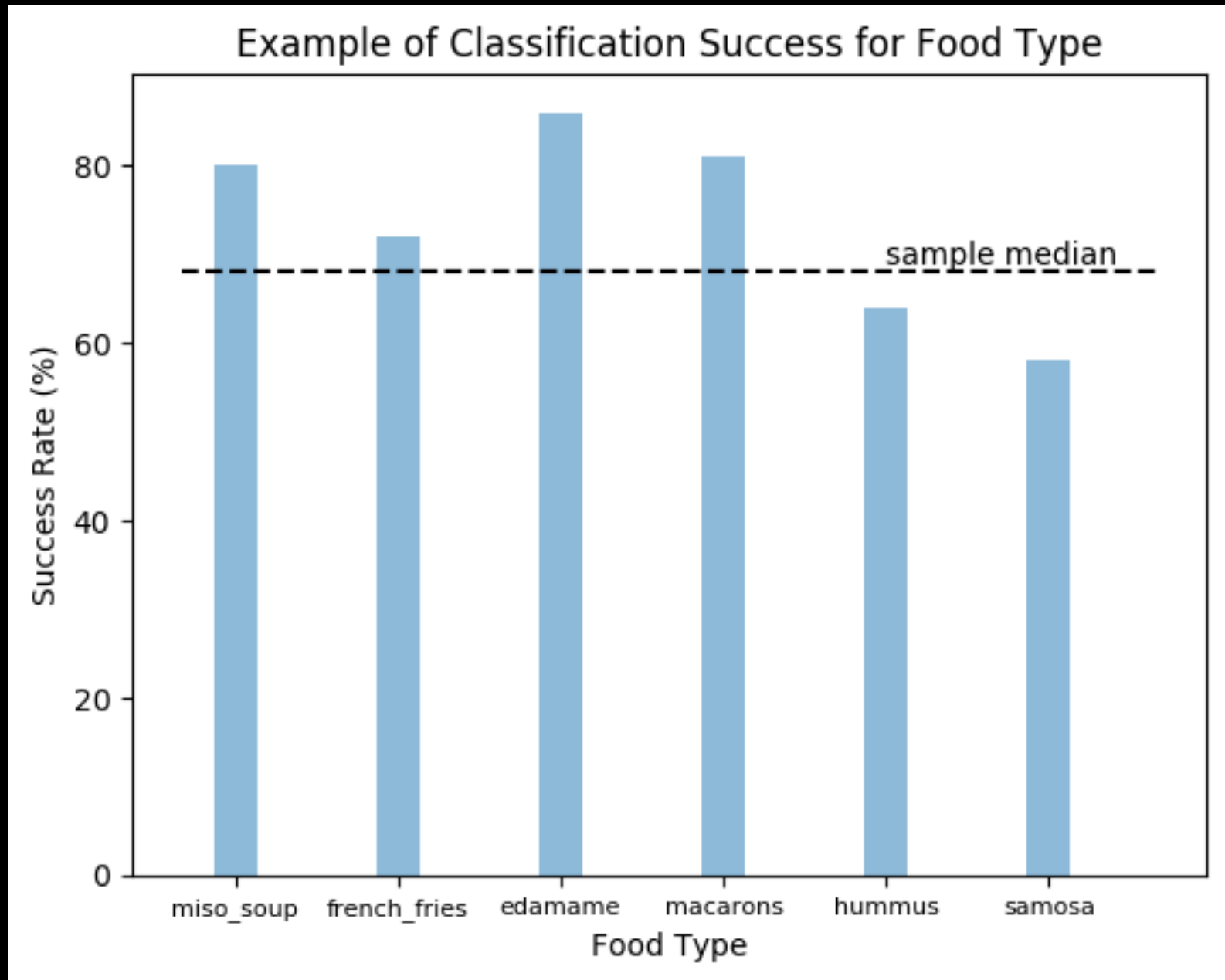




With features:



# Classification by Food Type



# Classification as Vegan or Not

