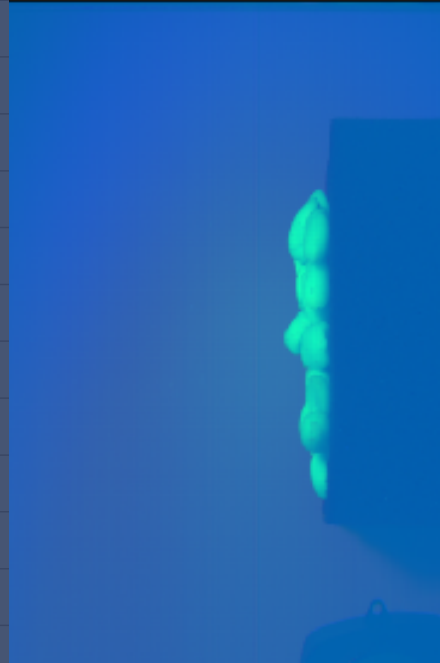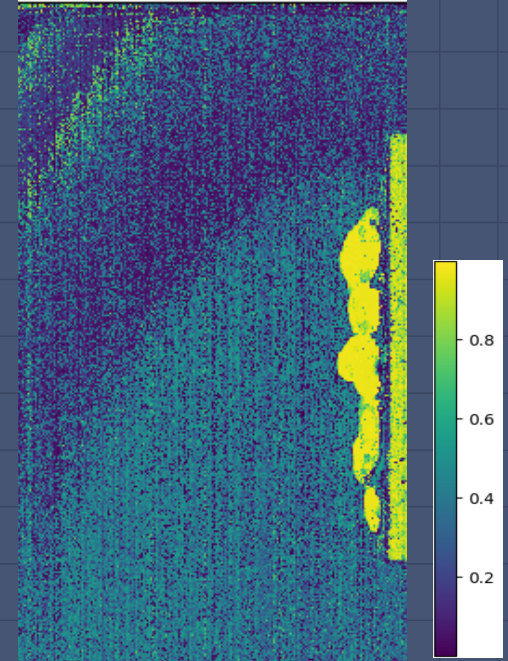# Heatmaps

- Easy to understand large quantities of information
  - Darker Color = Lower Probability
  - Lighter Color = Higher Probability
- Can visually identify presence and location of allergen
- Can externally identify type of allergen
- Can understand relative amount

1. Hyperspectral Image of Shell-Off Peanuts on Platform with PCA

2. Heatmap of Shell-Off Peanuts on Platform, Searching for Nuts
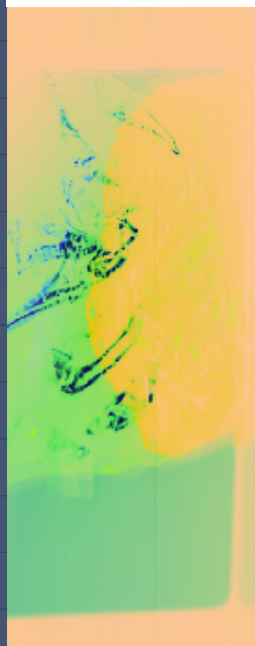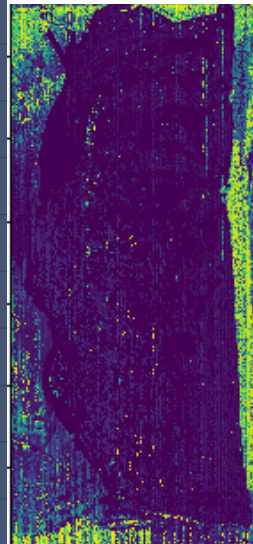
1

Heatmap Example: Noodles

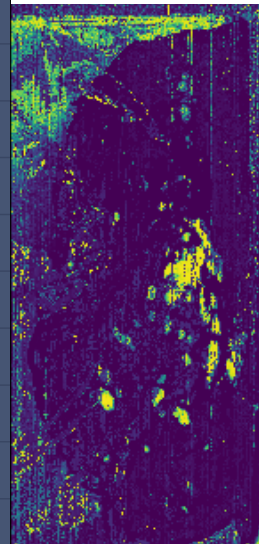1. Hyperspectral Image of Cooked Noodles w/o Peanuts with PCA

2. Hyperspectral Image of Cooked Noodles w/ Peanuts with PCA

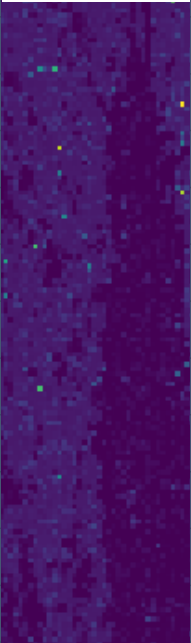3. Heatmap of Cooked Noodles w/o Peanuts, Searching for Nuts

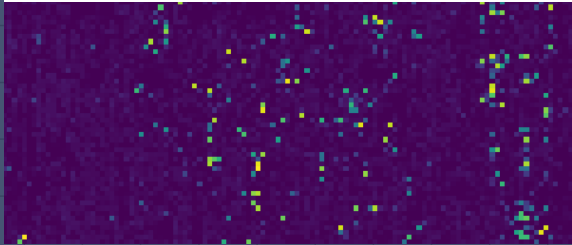4. Heatmap of Cooked Noodles w/ Peanuts, Searching for Nuts
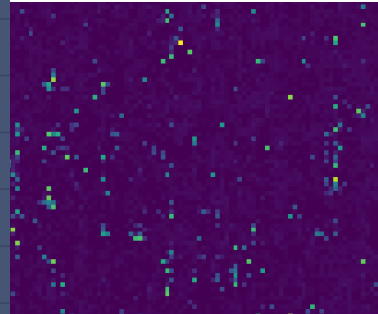
Heatmap Example: Flour

1. Heatmap of 100 grams of Wheat Flour Mix, Searching for Nut

2. Heatmap of 3:100 gram (Peanut: Wheat Flour) Mix, Searching for Nut

3. Heatmap of 10:100 gram (Peanut: Wheat Flour) Mix, Searching for Nut

4. Heatmap of 100:100 gram (Peanut: Wheat Flour) Mix, Searching for Nut