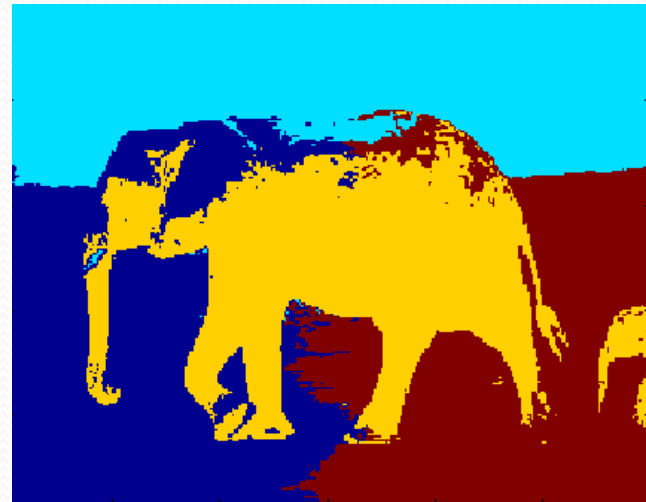
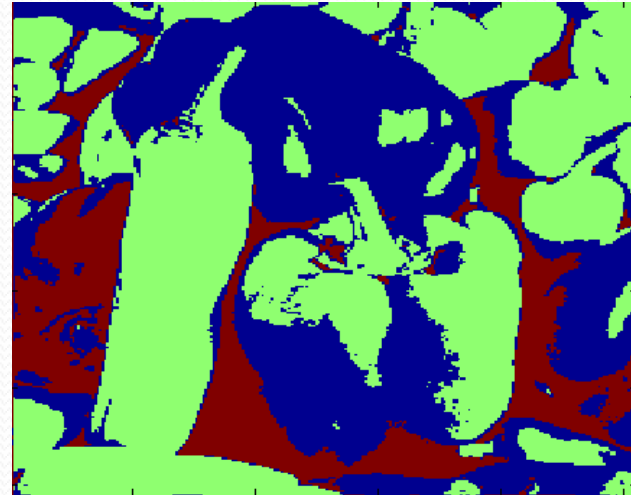


Ben Mears

Week 2 REU Presentation

Segmentation



Object Recognition

- Spent a lot of time playing around with number of features, number of cluster (codewords), and number of pixels sampled from each image
- Found that using the BSXFUN function in Matlab significantly improved the run time of my scripts

Confusion Matrix



	Car	Airplane	Elephant	Face	Minaret	Rhino
Car	75.60%	0%	23.40%	0%	0%	0%
Airplane	17.20%	39.10%	0%	43.80%	0%	0%
Elephant	63.60%	0%	22.70%	11.40%	2.30%	0%
Face	7.60%	3.80%	0%	88.70%	0%	0%
Minaret	1.80%	0%	8.90%	3.60%	85.70%	0%
Rhino	79.50%	0%	20.50%	0%	0%	0%



Object Recognition Success

- Good results for Minarets, faces, and cars



Objection Recognition Failures

- Confused elephants with cars
- Never detected rhinos???
- Limited success with planes



Progress of Project Ideas...

- Video Footstrike analysis
 - Issues:
 - Motion being examined is subtle
 - Different angles of camera
 - Continuum of pronation
 - Will probably just play around with this idea in my “free time”
- TrecVid
 - Pros:
 - Progress has already been made on it
 - Lots of room for experimentation
 - Incorporates much that we have already covered in the short course
 - Will make Marshall happy!