From Students…
…to Professionals

MICHIGAN STATE UNIVERSITY

Beta Presentation

ERP Air Force: Drone Elephant
Recognition and Tracking

The Capstone Experience

Team Evolutio

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Project Overview

• ERP is founded to preserve and protect South Africa’s Elephants
  ▪ Drones
  ▪ GPS Collars
• The goal of our project is to help ERP analyzing their daily data
  ▪ Auto-identify Elephants form drone footage
  ▪ Inform rangers where to search for Elephants
System Architecture

Diagram:
- Footage
- YOLOv3
- Detection
- GPS Database
- Python + Flask API
- VueJs UI
- GPS Location
- Feature Extractor
- RNN
- GPS Prediction
Image Detection
GPS Prediction Map

Predicted point
Elephant ID: 1426115
Time: 2019-09-20 13:00:00
Location: (-26.6147, 32.7317)
GPS Prediction Page (Satellite View)
Video Detection Page
What’s left to do?

- Documentation
- Finish refining models
- Bug test
- Ship to client
Questions?