Idea

- Take aerial group pictures
- A fresh perspective
Research Problem

Identify faces in a room

Form groups of faces to take picture of each group

Calculate ideal camera pose

Fly to ideal camera pose

Smile detection to trigger picture taking
How to Solve

- OpenCV for face detection
  - with FaceRecognizer

- Clustering to determine groups
  - K-Means or different

- Smile detection
  - With Cascade Classifier and Haar-like features
Implementation Plan

- Face detection
- Clustering and pose calculation
- Smile detection
Potential Applications

Family events
• no need to look for a photographer

Class/Graduation pictures
• by capturing from an angle we capture all the faces regardless of height

Stage show
• no obstruction though silly photographers
Feedback