Robust Facial Expression Recognition

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Motivation and Objectives
- Natural computer interfaces
- Automatic facial expression recognition
- Uncontrolled environments
- Need to improve robustness

Framework
- Active Appearance Models (AAM)
  - Good representation of the face
  - However sensitive to initialization
  - Explore initialization space with GPU

AAM Initialization

Accuracy Comparison

Performance Results
- 20x speedup

Live Application