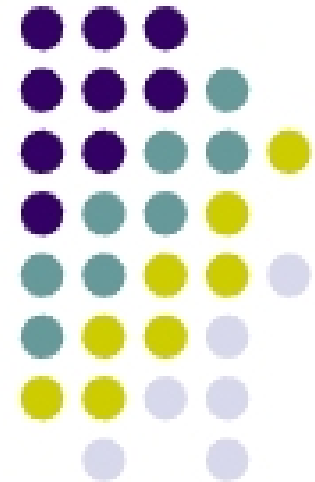
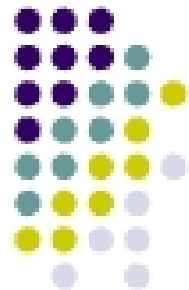


Trainable Videorealistic Speech Animation

Tony Ezzat, Gadi Geiger,
Tomas Poggio@ MIT

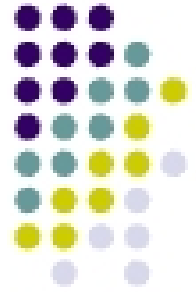
Presented by: Yinan Fan
04-26-2007





News Coverage

- (July 23, 2002) **REPORTS FROM SIGGRAPH-2002** - Wendy Ju: [Character Animation](#)
- (July 2, 2002) **CNN** : [Video Research at MIT Puts Words into Mouths](#)
- (June 30, 2002) **ASSOCIATED PRESS** - Theo Emery: [Video Research at MIT Puts Words into Mouths, with Startling Results](#)
- (June 17, 2002) **THE DISCOVERY CHANNEL** [Toronto, Canada] - Jennifer Scott **Video:** [Science, Lies & Videotape](#)
- (May 28, 2002) **DER SPIEGEL** [Germany] - Marco Evers: [Videomanipulation: Wie Bilder Luegen Lernen](#)
- (May 20, 2002) **NBC TODAY SHOW** - Katie Couric: **Video:*** (100 Kbps) (300 Kbps)
- (May 20, 2002) **MIT NEWS OFFICE: TECH TALK** - Deborah Halber: [Realistic Animation of Human Face Makes Simulated Talking Look Real](#)
- (May 16, 2002) **NPR** - "All Things Considered" - Robert Siegel: **Audio:** [MIT Video Lipsync](#)
- (May 16, 2002) **TORONTO GLOBE & MAIL** - Graeme Smith: [Computers Fake Moving Mouths](#)
- (May 15, 2002) **BOSTON GLOBE** - Gareth Cook : [At MIT, They Can Put Words in Our Mouths](#)



Background

- Facial Modeling
 - 3D methods
 - Image-based methods: *photorealistic?, videorealistic? Parsimonius?*
 - Video Rewrite
- Speech Animation
 - Keyframe
 - Physics-based
 - Machine learning methods
 - Problem: *Motion, smoothness, dynamics, coarticulation effects...*
- MMM