#### Portable Emotions

Displaying Affective States in Virtual Environments Rebecca Perry - Project 2



"The skills of emotional intelligence have been argued to be a better predictor than IQ for measuring aspects of success in life."

-Rosalind Picard

#### Introduction

- More of our interactions are becoming "virtual" to some extent
- The Terra Nova blog alone lists dozens of actual virtual worlds
- Avatars represent us in virtual worlds, but are largely expressionless. How can we suceed, socially, in virtual worlds?

## Project Goal



- Create avatars with affect
- Use Google
  Tracker software
   to capture and
   record a library
   of user facial
   expressions
   representing
   emotional states

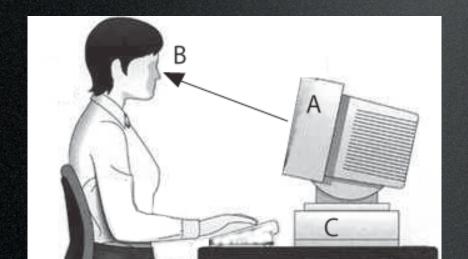
## Expression Library

• Expression library is stored as avatar attributes, linked to a database on user's computer



# Transferring Affect to the Virtual World

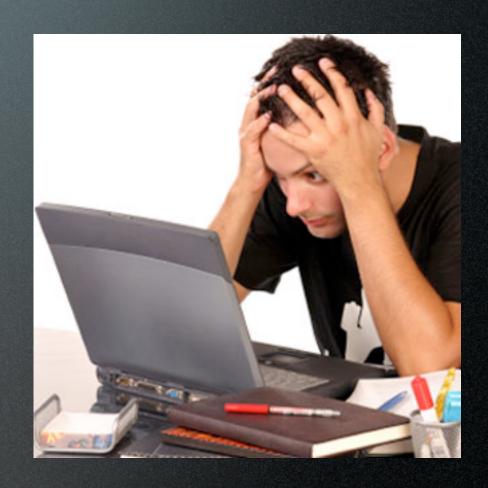
- As an avatar interacts in a virtual world, tracker software senses user's real life expression
- Appropriate stored expression is applied to avatar





#### Issues

- What if you don't want to look photorealistic?
- Speed of expression application
- Privacy need to control who sees your expressions



## Sources, Related Work

- Rosalind Picard, Affective Computing, Analysis of Affective Psysiological State (1997, 2001)
- Mike Rozak, <u>www.CircumReality.com</u>, a player-created multi-user virtual world (2008)
- Oliver Gan, Virtual Art: From Illusion to Immersion (2003)
- Rob Shields, The Virtual (2003)