USER PROFILING AT AN INTERACTIVE TABLETOP DISPLAY
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PROBLEM
Tabletop computers are useful because multiple users can...
- Interact with a single display
- Come and go freely
- Switch positions around the table
- Place their arms and objects on the table
BUT
Menus, text and other interface components must appear oriented properly and be viewable to all of the users

SOLUTION
- Utilize user profile information to help determine the "best" location and orientation of on-screen objects
- Use a probabilistic model to extract the user profiles

MODEL CONSTRUCTION
- Collect empirical data from real users
- Use known causal relationships in combination with empirical data to predict appropriate object placement
- Include information about all users in the environment

MODEL PROPERTIES
- The more knowledge that is present to the system, the better it can predict how to present information
- The same model can be used to correct errors made by the system about a user's intended action

A Probabilistic Model of Interaction at a Tabletop Display