An Input and Gesture Recognition Framework for TacTile

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TacTile Architecture

- Rendering machine (client)
- Tracking machine (server)
- LCD display
- Cameras
- Network
Initial Goals

• Desired a C/C++ client interface

• Simulate a mouse device under Windows
  – Click, Drag, Double-Click, Scroll...

• We ended up with only clicking and dragging...
Regions of Error
Present Goal

• Determine the source of error when reconstructing touch position data

• Develop a robust back-end for the framework
  – This will provide a stream of touches to the gesture library
  – Analyze server input, filter, etc.
  – Configured by user
The Gesture Library

- An object-oriented library for event driven processing of touches
- Gestures will be realized by state machines
The End Result

• A complete, platform-independent framework for managing touch input and gesture recognition in applications designed for TacTile

• The mouse device may now be implemented in a robust manner