

# Interactive Media and Natural Interfaces

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IMPA

# Overview

- Investigate New Technologies
  - Capturing / Processing / Interacting with Audio-Visual Data
- Develop Experiments
  - Emerging Applications

# Topics

- Tangible Interfaces
  - Multitouch Interaction
  - Computer Graphics
  - Image Processing
  - Sound Synthesis
- ★ *Authoring Environments*

# Applications

- Digital Photography
- Video
- Animation
- Games
- Education
- Computer Music
- etc...



# Multidisciplinary Group

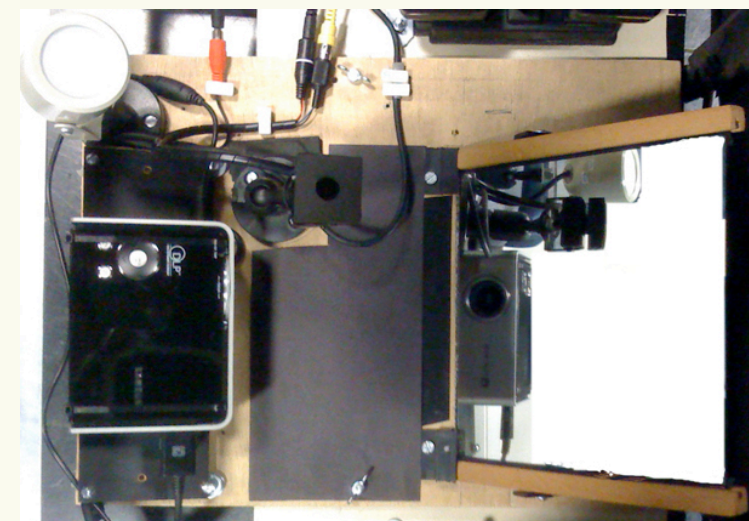
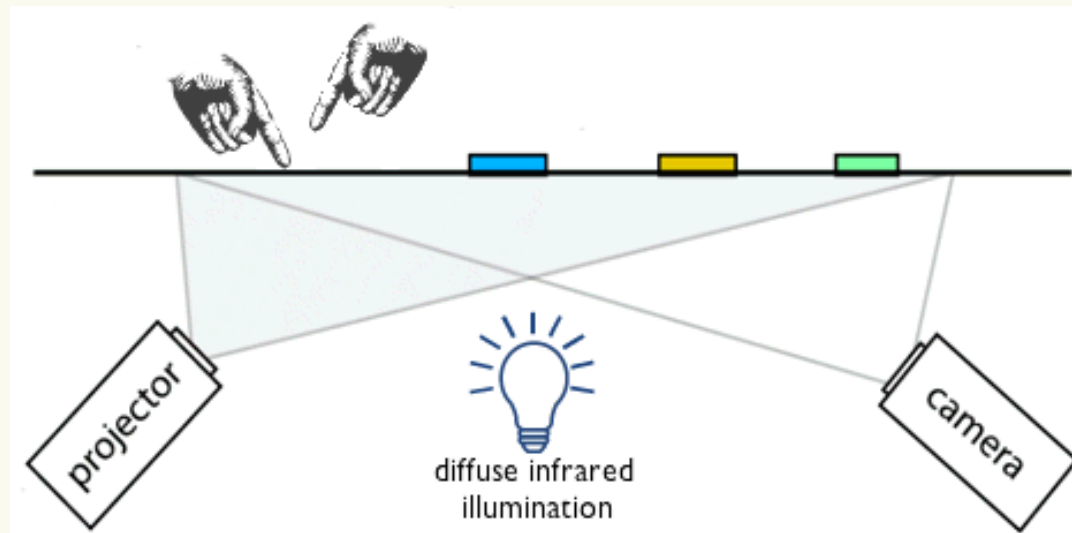
- Ricardo Castaneda Marin - IMPA (PhD. Mathematics)
- Alexandra Alves - USP (PhD. Computer Science)
- Erick Passos - UFF (PhD. Computer Science)
- André Maximo - UFRJ (PhD. Computer Science)
- Felipe Moura - UFRJ (Ms. Computer Science)
- Rodolfo Lima - UFRJ (BE. Electrical Engineering)
- Maria Paula Saba - ESDI (BA. Industrial Design)
- Luisa Fosco - ESDI (BA. Industrial Design)
- Patrick Matos - ESDI (BA. Industrial Design)
- Nina Paim - ESDI (BA. Industrial Design)
- Fernando Ribeiro - PUC (BA. Comm. Design)
- Joana Passi - UFRJ (BFA. Fine Arts)

# Projects

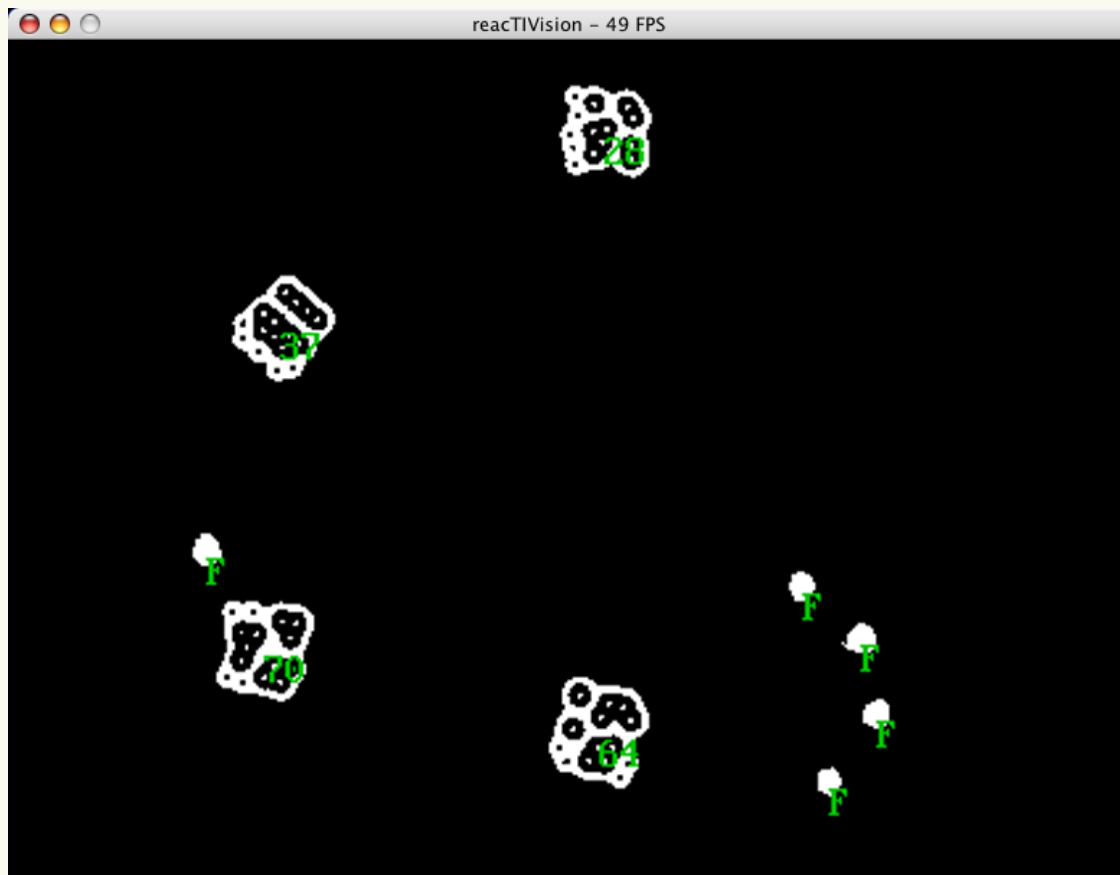
- Two-People Teams
  - Complementary Background
- Themes
  1. Media Browser
  2. Archive Research
  3. Computer Game
  4. Education / Storytelling
  5. Musical Performance
  6. Social Networking

# Hardware Platform

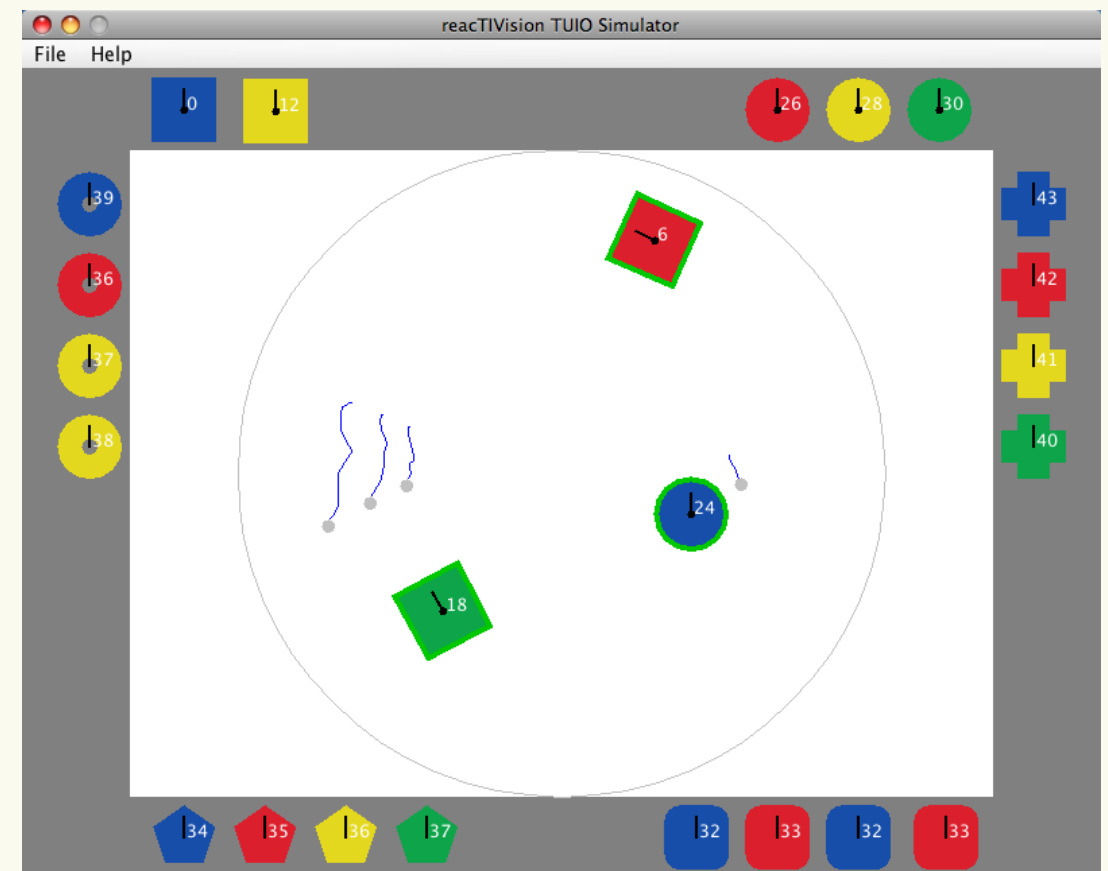
- i.Table



# Software Environment



- ReacTIVision



- TUIO Simulator

# Radical Development !

- 8 Sessions
- ▶ 2 hour Duration
- Topic Presentation
  - Instructor (1 hour)
- Project Discussion
  - Groups (6 x 10 min.)
- *5 Lab Sessions*

Calendar for October 2008. The calendar shows dates from Sunday, October 28 to Saturday, November 1. The days of the week are labeled at the top: Sun, Mon, Tue, Wed, Thu, Fri, Sat. The dates are arranged in a grid. The dates 3, 10, 17, 24, and 31 are highlighted in red, indicating session dates.

Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	Oct 1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	Nov 1

Calendar for November 2008. The calendar shows dates from Sunday, November 2 to Saturday, November 8. The days of the week are labeled at the top: Sun, Mon, Tue, Wed, Thu, Fri, Sat. The dates are arranged in a grid. The dates 7, 14, 21, 28, and 5 (December 5) are highlighted in red, indicating session dates. The dates 11, 18, 25, and 2 (December 2) are highlighted in yellow, indicating lab sessions. The date 4 (December 4) is highlighted in blue, indicating a session date.

Sun	Mon	Tue	Wed	Thu	Fri	Sat
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	Dec 1	2	3	4	5	6

# Presentation Schedule

1. Game Plan (*concepts*)
2. Dev. Environment (*tools*)
3. Interactive Techniques (*setup*)
4. Interface Design (*reactive objects*)
5. Graphics / Images (*static media*)
6. Video / Sound (*dynamic media*)
7. Animation / Simulation (*app behavior*)
8. Wrap-Up (*course evaluation*)

# Project Checkpoints

- Group Formation (*social networking*)
- Theme Selection (*alternatives*)
- Project Definition (*main concepts*)
- Development Plan (*schedule*)
- First Prototype (*basic infrastructure*)
- Second Prototype (*simple example*)
- Test (*complete demo*)
- Final App (*full functionality*)



# Competition





# Expert's Jury



**Cora Ronai**

Editor of Revista Digital, O Globo



**Maria Arlete Gonçalves**

Cultural Director, OI Futuro



**Ruben Zonenchein**

Technical Director, Digitok



**Rodolfo Capeto**

Director, ESDI

# Killer Apps ;)

- CollecTable
- Foco
- Flatland
- Reactoons
- DiscoTable
- React••Bar

**Play it Again, Sam...**