

# Post-Desktop User Interfaces

Seminar at the  
Media Computing Group  
WS 06/07

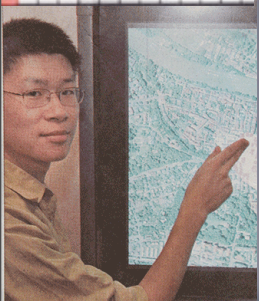
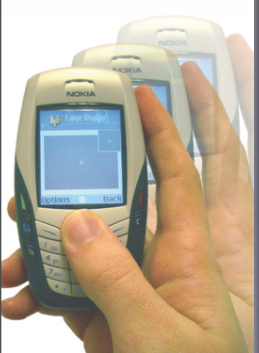
Prof. Dr. Jan Borchers

Rafael "Tico" Ballagas M. Sc., Dipl. Inform. Thorsten Karrer,  
Dipl. Inform. Daniel Spelmezan, David Holman M. Sc., Eric Lee M. Sc.

Media Computing Group

Post-Desktop User Interfaces

Jan Borchers





# Contents

- Introduction
- Seminar logistics
- Presentation and distribution of topics
- Research and presentation tips





# Post-Desktop UIs?

- Desktop metaphor: office-based
- What about non-office tasks?
- Task-specific user-interfaces?
- Research field: Human Computer Interaction
  - ➔ Media Computing Group at RWTH





# Media Computing Group

- Introduction
- Logistics
- Topics
- Tips

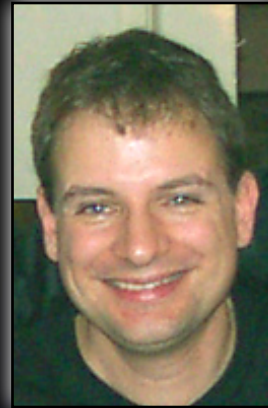
- Research and development
  - Interaction with multimedia
  - Ubiquitous computing
  - Tangible user interfaces
  - HCI design patterns
- Based in computer science





# The Team

- Introduction
- Logistics
- Topics
- Tips



Prof. Dr. Jan Borchers  
- Karlsruhe  
- Darmstadt, Linz  
- Stanford

Dipl. Inform.  
Daniel Spelmezan  
- RWTH



Rafael Ballagas  
M. Sc.  
- Stanford



Dipl. Inform.  
Thorsten Karrer  
- RWTH



Eric Lee  
M. Sc.  
- Stanford

David Holman  
M. Sc.  
- Queens Uni.



Media Computing Group

## Post-Desktop User Interfaces

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# Our Projects

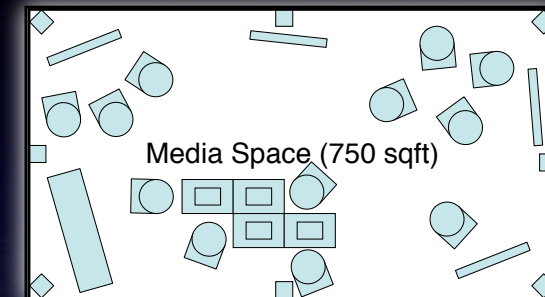
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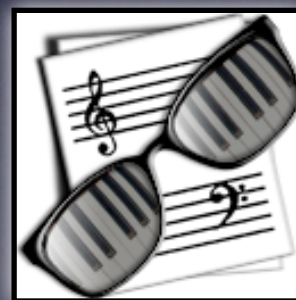
Interactive Exhibits for  
the Regensburg Experience



Virtual Conducting  
Systems



Interactive Room for  
Collaborative Work with  
Different Types of Media



coJIVE - collaborative  
Jazz Improvisation



Interacting with  
Large Public Displays

Media Computing Group

Post-Desktop User Interfaces

Jan Borchers





# Our Projects

● Introduction

Logistics

Topics

Tips

## Improving Orchestral Conducting Systems in Public Spaces: Examining the Temporal Characteristics and Conceptual Models of Conducting Gestures

Eric Lee  
Marius Wolf  
Jan Borchers

Media Computing Group  
RWTH Aachen University



Interactive Ex  
the Regensbu

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displays

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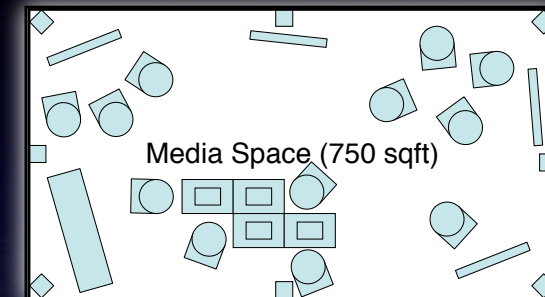
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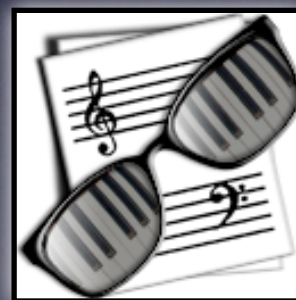
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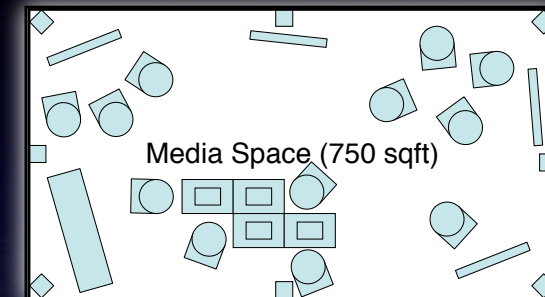
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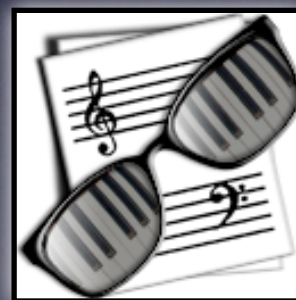
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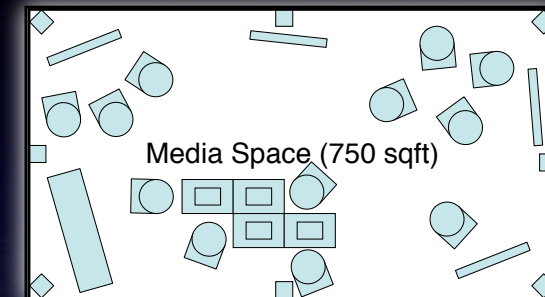
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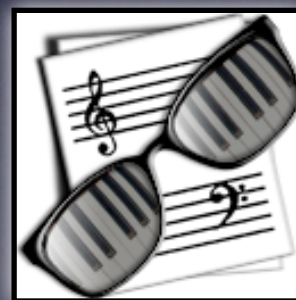
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# Course Logistics

- When: Thursdays, 16:00-17:30
  - See Topics list for exact dates
- Where: Room 2010 (here)
- Format:
  - One hour presentation
  - 30 minute Q&A





# Group Format

- Groups of 2
  - No separation of responsibility.
  - Each person should know the content and be able to give presentation / answer questions.
  - Questions may be directed at a particular person during Q&A session.



# Written Report

- Paper Deadline: One week before presentation.
- Corrections / Improvements after deadline
- We focus on teaching the basics of writing a conference paper.
- Must follow CHI conference paper format guidelines:
  - Max: 10 pages (Learn to be concise)



# Further Requirements

- meetings with supervisor
  - Presenting papers, articles, etc.
  - Structure of presentation and paper
  - Presenting slides (2 weeks before presentation)
  - Discussing paper draft
- Participate in at least 1 hour of user testing
  - Deadline: end of the semester





# Topics

- Topics were chosen by us because we want to learn more about them.
- You are responsible for informing us
- Need more than just a summary
  - Demonstrate higher level understanding:
    - Taxonomy / Ontology / Design Space
    - Derive Design Patterns





# I. Improving sports performance with wearable computing

- Supervisor: Daniel Spelmezan
- Students
  - Florian Reske, Manu Agelescu
- Presentation date
  - 2006.10.26





# 2. Real-time motion and activity recognition with sensors

- Supervisor (Daniel Spelmezan, Tico Ballagas)
- Students
  - Moritz Wittenhagen, Tim Hemig
- Presentation date
  - 2006.11.02





# 3. End User Programming

- Supervisor: Tico Ballagas
- Students
  - Klaus Meyer, Chirstian Brockly
- Presentation date
  - 2006.11.09





# 4. Physics in the user interface

- Supervisor: Thorsten Karrer
- Students
  - Leonhard Lichtschlag, Katja Kurdyukova
- Presentation date
  - 2006.11.16





# 5. Mobile Music

- Supervisor: Tico Ballagas
- Students
  - Mei Feng Liao, Hendra Gunawan
- Presentation date
  - 2006.11.23





# 6. Tabletop Interactions

- Supervisor: David Holman
- Students
  - Aldabert Schanowski, Christian Gass
- Presentation date
  - 2006.11.30





# 7. Fiducials

- Supervisor: Tico Ballagas
- Students
  - Hoefig Kai, Noriyasu Vontin
- Presentation date
  - 2006.12.07





# 8. Affect

- Supervisor: David Holman
- Students
  - Alexander Schiffel, Daniel Herding
- Presentation date
  - 2007.01.18





# 9. Multimedia Architectures

- Supervisor: Eric Lee
- Students
  - Alex Hoffmann, Ines Faerber
- Presentation date
  - 2007.01.25





# 10. Audio Skimming

- Supervisor
  - Rafael Ballagas
- Students
  - Bjoern Ganslandt, Nils Jeners
- Presentation date
  - 2007.02.01





# Seminar Tips

- Some pointers on
  - Topic research
  - Paper writing
  - Slide preparation
  - Presenting





# Types of Publications

- Book - (~ 20 years)
- Journal Paper - (~5-10 years)
- Conference Paper - (~3-5 years)
  - Stick to reputable conferences (e.g. ACM, IEEE, and others)
- Workshop Paper - (~1 year)
- Technical Report - (caution: no peer review)



# Library Support

- The Library has a variety of resources to help you find these different types of publications
- Special course for our seminar Tuesday, 6-9, 10am



# Writing Tips

- Papers and Presentations must be in English
- Review Strunk & White's "Elements of Style"
  - Retail for around 6 Euros
  - Free version available online





# Typical Review Template

- Rating of Expertise
- Statement of Contribution to HCI
- The Review:
  - Relevant previous work
  - Significance of contribution
  - Validity of work
  - Originality of Work
- Areas of Improvement
- Rating (1-5)



# Contribution and Benefits Statement

- Authors must submit along with paper
- For each paper you reference you should provide a C&S statement
- Maximum 30 words



# Slide Design

- Keep a clear structure
- Important information?
- Our templates (Keynote, PPT)





# Slide Design

- Keep a clear structure
- Important information?
- Our templates (Keynote, PPT)

Title and Author





# Slide Design

- Keep a clear structure
- Important information?
- Our templates (Keynote, PPT)





# Slide Design

Slide title

- Keep a clear structure
- Important information?
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# Slide Design

- Keep a clear structure
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# Slide Design

- Keep a clear structure
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Sections

Slide count

28 / 29





# Slide Design

- Keep a clear structure
- Important information?
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# Slide Content

- Text
  - Supports presentation
  - Bullet points: short but meaningful
- Media
  - Images
  - Audio & Video





# Presentation

- Appropriate volume, speed and tone
- Draw in the audience
  - Look at them
  - Questions & Demonstrations
- Rehearse your presentation

Speak up!  
But don't shout