

## T-SHARE



T-shirts for ubiquitous group interaction

German-Israeli Minerva School for  
Ubiquitous Display Environments:  
Intelligent Group Interaction, Foundations and  
Implementation of Pervasive Multimodal Interfaces

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Group Project: T-SHARE

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## Why T-SHARE?

- T-SHARE supports a community of individuals wearing dynamic T-shirts
- It enables sharing of information:
  - Reaching out to the person at the end of the line
  - Relaxing cognitive load by giving the relevant information at the right context within a guided tour
  - Group activity
  - Assisting both the guide and the group members



## Concept

Allow a guided group of tourists to:

- 1) Improve group experiences during a guided tour
- 2) Empower the guide to encourage participation
- 3) Ease and support the interaction between the guide and the group during the tour
- 4) Access context-aware information in real-time
- 5) Minimize cognitive load/resources on guide and individuals



## T-SHARE Content

Who controls the content?

1. GUIDE
2. YOU
3. CONTEXT



## Scenarios

**YOU control T-SHARE content**

Message to the Guide (explicit)

Feedback / showing interest

Your personal design!

**GUIDE controls T-SHARE content**

Multi T-shirt Display

Group Identification / Splitting

Transfer occluded information

**Examples**

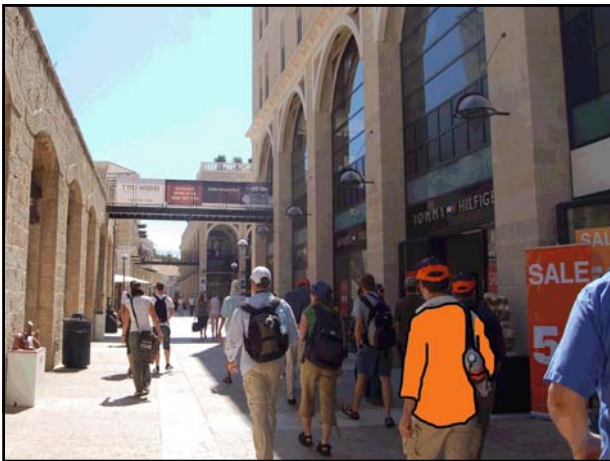
**CONTEXT controls T-SHARE content**


Controlling the group dynamic

Tracing group location / spreading

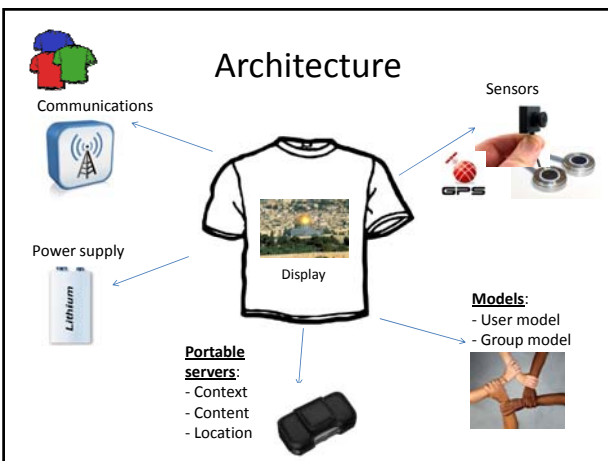
Tracking group preferences / interests...






 **Relevant fields of research**

- Augmented reality
- Ubiquitous computing
- Social sensor processing
- Bio-feedback
- Community based interactions
- Cooperative displays
- Advanced displays
- Wearable computers
- Group models
- User models
- Media art
- Multi-agent environment



 **Research question**

- How can we improve the experience of a guided tour:
  - Foster social interactions
  - Enhance group experience
  - Increase the cohesiveness of the group
  - Give the guide more opportunities to give/share information
  - Study the impact of the T-SHARE on group behavior in guided tours
  - Decrease the cognitive load for the guide and the group members



## Summary

- Innovative technology
- Innovative social approach, **T-SHARE**
- Relevancy to Jerusalem and other tourist areas
- Challenging but feasible
- Self containment
- Save cognitive resources (resource efficient)



## Future perspective

- The T-SHARE concept may serve other group experiences where there is multiple individual interactions such as parties, social events, music festivals, political events, seminars, schools etc...
- The concept uses multi - disciplinary fields of research and may spur new technological innovation and social interactions

