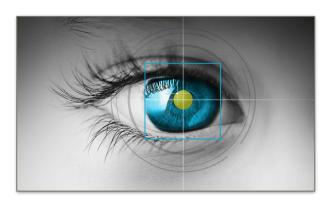
## Programme

- 09:30 'Transparency and reporting of eye tracking data', Jacob Lund Orquin, Aarhus University.
- 10:00 'From the lab into the wild' Annika Wallin, Lund University
- 11:00 Coffee break
- 11:15 'It still takes to long to analyse eye tracking data from portable devices', Jesper Clement, CBS.
- 12:15 Lunch
- 13:15 'Analysis of mobile data using manual annotation', Kerstin Gidlöf, Lund University
- 14:15 Coffee break
- 14:30 'Automatic analysis of mobile eye tracking studies', Thies Pfeiffer, Bielefeld University
- 16:30 End of workshop



## Interacting Minds Centre

The Interacting Minds Centre for the Study of Cognition, Communication and Choice. Specific abilities for interaction are key to being human. Interactions affect our bodies, our minds, our brains and the world we live in. We are, however, only beginning to understand even the most basic mechanisms. Successful interaction is critical for cooperation, coordination and learning. When this fails, confusion and conflict abound. In many clinical disorders, interactions that otherwise seem automatic may be difficult or outright impossible.

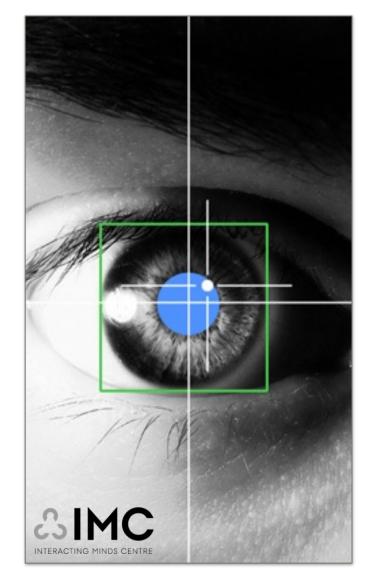
The Interacting Minds Centre (IMC) provides a transdisciplinary platform to study human interaction. It involves researchers from the humanities, social sciences, cognitive sciences, biology and clinical research. This is necessary, because through interactions, humans construct worlds that are at once physical, economic, symbolic and normative. We will therefore study the interplay between three related topics: cognition, communication, and choice. Bringing these fields together to bridge topics related to human interaction makes IMC a unique methodological and theoretical centre of research and inquiry.

### IMC is funded by Aarhus University 2012-16 as part of the interdisciplinary research initiative.

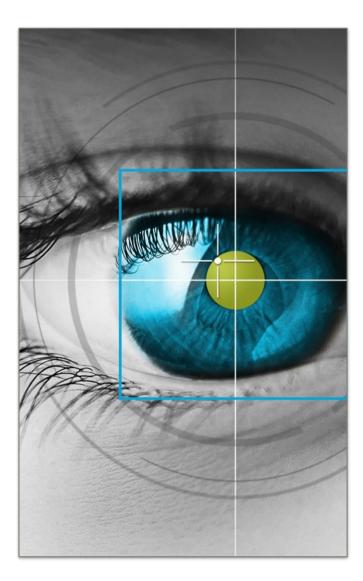
#### IMC is located in the Nobelparken campus of Aarhus University.

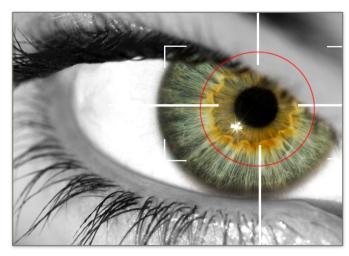


# Methodological Issues in Mobile Eye Tracking



## Methodological Issues in Mobile Eye Tracking





#### 09:30: Jacob Lund Orquin Transparency and reporting of eye tracking research

Transparency in reporting is essential to reproducibility, but how well is eye tracking research doing? To answer this, we coded 73 eye tracking papers on all methods related aspects. The results are sobering and we aim to develop a guideline for the reporting of eye tracking studies.

#### 10:00: Annika Wallin From the lab into the wild

I want to talk about some of the issues you face when you move studies related to JDM from controlled laboratory settings to the wild, by using mobile eye tracking. I will discuss the possibilities and constraints that we've met with respect to things such as experimental control, stimuli, complexity and individual differences.

11:00: Coffee break

#### 11:15

Jesper Clement

### It still takes to long to analyse eye tracking data from portable devices

We know from literature consumers might shop by routine or by simple heuristic rules and justification techniques. But the related visual search and the influence from real world objects are poorly described. One reason for this is the usability of research technique for measuring visual attention in real shopping situations. Although eye-tracking has been portable for almost a decade, the complexity in collecting valid data is still an issue to discuss. One major drawback is the extended time in coding and analyzing portable eye-track data. The purpose for my presentation is starting this discussion among people with knowledge on in-store eye-tracking.

#### 12:15 Lunch

#### 13:15: Kerstin Gidlöf Analysis of mobile data using manual annotation

I want to talk about the issues we need to take into consideration when analyzing mobile data and how this differ from data obtained from a stationary eye tracker. How can we take the rich and noisy output obtained form a mobile eye tracker and transform it into proper measures? With examples from our own recordings I will talk about how we have tried to solve some of these issues. Kerstin Gidlöf, Lund University.

14:15: Coffee Break

#### 14:30: Thies Pfeiffer Automatic analysis of mobile eye-tracking studies

With the advance of the mobile eye-tracking devices, researchers may now finally address more interactive settings and even leave their laboratory to assess human behaviour in real-world scenarios. The gained freedom, however, comes with a cost: hours of manual annotation are needed to code the recorded gaze videos. In my talk I present technologies from the area of augmented reality that enable an automatic real-time analysis of gaze data for specific settings, thus reducing the additional effort for annotation to zero.

16:30: End of Workshop

