



1st International Workshop on Pervasive Eye Tracking and Mobile Eye-Based Interaction - PETMEI 2011

Andreas Bulling

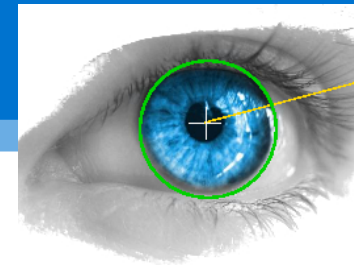
University of Cambridge / Lancaster University, UK

Andrew T. Duchowski

Clemson University, USA

Päivi Majaranta

University of Tampere, Finland



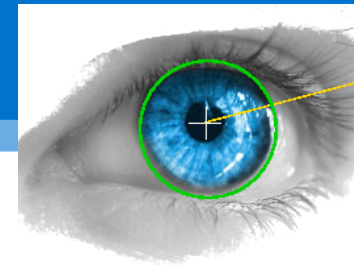
... but please still

- 1) **ask questions** during and after each presentation
- 2) **discuss lively** during the breaks
- 3) **write down any implications, challenges or applications** that come to your mind

in order to foster interaction, boost novel ideas and
prepare for the plenary discussion.

Thanks! ;-)

Thanks to the PC members



Hirotaka Aoki, Tokyo Institute of Technology, Japan

Roger Carpenter, University of Cambridge, United Kingdom

Anind Dey, Carnegie Mellon University, USA

Hans Gellersen, Lancaster University, United Kingdom

Mary M. Hayhoe, University of Texas, USA

Per Ola Kristensson, University of St Andrews, United Kingdom

Antonio Krüger, German Research Center for AI, Germany

Alexander de Luca, Ludwig-Maximilians-University Munich, Germany

Walterio Mayol, University of Bristol, United Kingdom

Antti Oulasvirta, Helsinki Institute for Information Technology, Finland

Pernilla Qvarfordt, FX Palo Alto Laboratory, USA

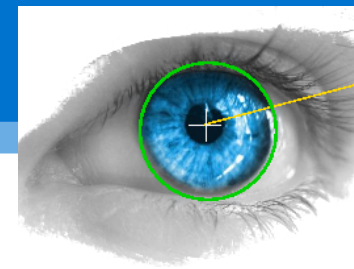
Albrecht Schmidt, University of Stuttgart, Germany

Sophie Stellmach, University of Magdeburg, Germany

Martin Tall, Duke University, USA

Shumin Zhai, Google Research, USA

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Champion



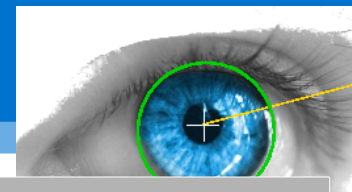
Contributors



Institutional

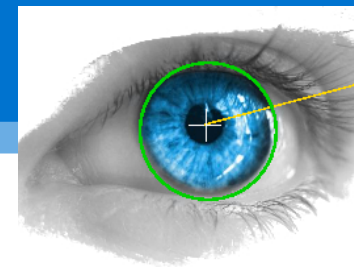


Program



09:00 – 10:00	Jeff B. Pelz (Keynote) <i>Semantic Analysis of Mobile Eye Tracking Data</i>	
10:30 – 11:00	Jurek Breuninger, Christian Lange and Klaus Bengler <i>Implementing Gaze Control for Peripheral Devices</i>	← Coffee break
11:00 – 11:30	Yanxia Zhang, Andreas Bulling and Hans Gellersen <i>Discrimination of Gaze Directions Using Low-Level Eye Image Features</i>	
11:30 – 12:00	Mélodie Vidal, Andreas Bulling and Hans Gellersen <i>Analysing EOG Signal Features for the Discrimination of Eye Movement with Wearable Devices</i>	
13:15 – 13:45	Shiwei Cheng <i>The Research Framework of Eye-tracking Based Mobile Device Usability Evaluation</i>	← Lunch break
13:45 – 14:15	Haiwei Dong and Zhiwei Luo <i>Human Factor Affects Eye Movement Pattern during Riding Motorcycle on the Mountain</i>	
14:15 – 14:30	Jayson Turner, Andreas Bulling and Hans Gellersen <i>Combining Gaze with Manual Interaction to Extend Physical Reach</i>	
14:30 – 15:00	Xinyong Zhang, Pianpian Xu, Qing Zhang and Hongbin Zha <i>Speed-accuracy Trade-off in Dwell-based Eye Pointing Tasks at Different Cognitive Levels</i>	
15:00 – 15:30	Aiko Hagiwara, Akihiro Sugimoto and Kazuhiko Kawamoto <i>Saliency-Based Image Editing for Guiding Visual Attention</i>	
16:00 – 16:15	Chip Tonkin, Andrew Duchowski, Joshua Kahue, Paul Schiffgens and Frank Rischner <i>Eye Tracking Over Small and Large Shopping Displays</i>	← Coffee break
16:15 – 16:30	Geert Brône, Bert Oben and Toon Goedemé <i>Towards a more effective method for analyzing mobile eye-tracking data: integrating gaze data with object recognition algorithms</i>	
16:30 – 17:15	Demo session	
17:15 – 18:00	Plenary discussion	

Joint dinner



Quanjude Roast Duck Restaurant

<http://chinabites.com/beijing/restaurants/quan-ju-de/57/>

Time:

7:00 pm (10 minute walk)

Address:

Haidian District,
1 Zhongguancun Dong Lu,
(Inside Qinghua Science Park)

Chinese Address:

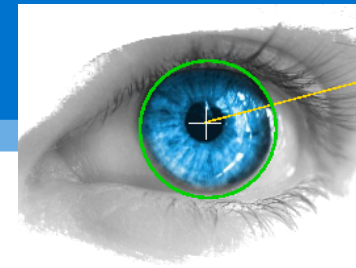
海淀区中关村东路 1 号院
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Phone:

82150018 82151015



Let's get started...



Pervasive eye tracking

Continuous eye monitoring and analysis 24/7

→ unobtrusive eye-based human-computer interfaces that will become pervasively usable in everyday life

Implications

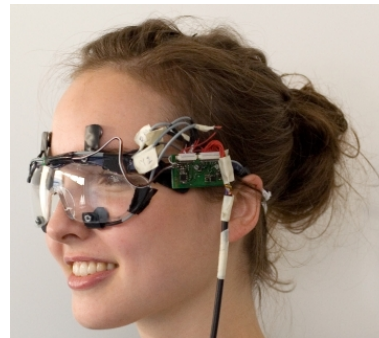


Tobii Glasses

Research Challenges



SMI Glasses



Wearable EOG Goggles



Tobii Eye Tracking Laptop

Applications