

# Eye-Tracking and Visual Analytics

## Introduction

Tanja Blascheck, Michael Burch, Michael Raschke

Participate!

<https://www.sli.do/>

#ETRATutorial-ETVA

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ETRA | Warsaw, Poland | 14.06.2018

# Introduction of Presenters



- Tanja Blascheck, Inria Saclay
  - Eye Tracking, User Studies, Visualization and Visual Analytics, Interaction Logs, Think-Aloud Protocols, Digital Humanities, Human-Computer Interaction



- Michael Burch, Eindhoven University of Technology
  - Dynamic Graph Visualization, Hierarchy Visualization, Visual Data Mining, Software and Information Visualization, Perception, User Studies, Evaluation



- Michael Raschke, Blickshift Analytics
  - Cognition and Visualization, Simulation of Mental Processes, Philosophical Questions of Visualization and Cognition, Human-Computer Interaction

# Introduction of Presenters

- Aviz, Inria



- Eindhoven University of Technology



- Blickshift GmbH



# Schedule

<b>Time</b>	<b>Presenter</b>	<b>Topic</b>
9:00 – 9:15	Tanja Blascheck	Introduction
9:15 – 10:00	Michael Burch	Eye tracking and visual analytics
10:00 – 10:30		Coffee break
10:30 – 11:15	Tanja Blascheck Michael Burch	Presentation of visual analytics tools
11:15 – 12:00	Michael Raschke	Introduction to Blickshift Analytics
12:00 – 13:30		Lunch break
13:30 – 15:30	Michael Raschke Tanja Blascheck Michael Burch	Hands-on tutorial: analyzing data using Blickshift Analytics
15:30 – 16:00		Coffee break
16:00 – 17:00	Tanja Blascheck	Discussion, Summary and Future Challenges

# Schedule - Lunch Break

- Lunch officially: 12:30 – 13:30
- Our lunch: 12:00 – 13:30
  
- We try to eat together (at the same tables) to have time for further discussion

# Sli.do

- Active participation
  - Questions
  - Polls
  - etc.
- <https://www.sli.do/>
- #ETRATutorial-ETVA
- Let's try this...
  - What are your expectations from this tutorial?

# Background

- Please state your name and affiliations
- How much experience do you have with eye tracking?
- What is your main research area concerning eye tracking?

# Literature

- **Visualization of Eye Tracking Data: A Taxonomy and Survey**  
Computer Graphics Forum (2017)  
T. Blascheck, K. Kurzhals, M. Raschke, M. Burch, D. Weiskopf, T. Ertl
- **A Task-Based View on the Visual Analysis of Eye-Tracking Data**  
Springer Book: *Workshop on Eye Tracking and Visualization* (2015)  
K. Kurzhals, M. Burch, T. Blascheck, G. Andrienko, N. Andrienko, D. Weiskopf

The screenshot shows the website of the Visualisierungsinstitut der Universität Stuttgart (VISUS). The page features a navigation bar with links for 'Startseite', 'Inhalt', 'Forschung', 'Projekte', and 'Publikationen'. The main content area displays a paper titled 'State-of-the-Art of Visualization for Eye Tracking Data' from the STAR Proceedings of EuroVis 2016, authored by T. Blascheck, K. Kurzhals, M. Raschke, M. Burch, D. Weiskopf, and T. Ertl. The abstract discusses the increasing application of eye tracking technology and the need for visualization techniques to analyze the resulting data. Below the abstract, there are several visualizations: a 'ACI-River' visualization representing Areas of Interest (AOIs) over time, a 'Space-time cube' visualization for a video stimulus, and a 'Parallel scarpeth' visualization representing AOIs and transitions between them. A circular 'heat map transition diagram' is also shown, representing areas of interest as segments and transitions as lines. The website footer includes the VISUS logo and the text 'Visual Analytics Project'.