STUDENT DAY | HUMAN-CENTRED COGNITIVE ASSISTANCE

SUMMER SEMESTER 2016 | COURSE & PROJECT WORK. INTERNSHIP PROJECTS. THESSES.

HUMAN-CENTRED COGNITIVE ASSISTANCE LAB.
The DesignSpace Group       www.design-space.org
Cognitive Vision            www.cognitive-vision.org
Spatial Reasoning           www.spatial-reasoning.com

HCC | UNIVERSITY OF BREMEN
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ROTUNDE (CARTESIUM BUILDING), ENRIQUE-SCHMIDT-STR. 5
THURSDAY AUGUST 4 2016 — 09:00 ONWARDS

ADVISORS
PROF. DR. MEHUL BHATT | JAKOB SUCHAN | VASILIKI KONDYLI
Presentation of ongoing and completed research based learning activities at the HCC Group, with a focus on developments during the Summer Semester 2016.

**SCHEDULE**

**09:00**  
**GETTING TOGETHER, COFFEE**  
(make sure to test your presentation / laptop connection to the Rotunde beamer at this time)

**INTRODUCTIONS — BRIEF STATEMENTS BY ALL PRESENTERS**

**10:00 - 12:40**  
**SESSION 1 — COGNITIVE COMPUTING**  
Students of computer science, digital media, and media culture present the state-of-the-art in select areas of research related to foundational methods in cognitive computing and human-centred assistive technologies relevant to everyday life and professional activity.

**12:40 - 13:40**  
**LUNCH (Informal)**

**13:45 - 15:00**  
**SESSION 2 — RESEARCH PROJECTS: LANGUAGE | VISION | LEARNING**  
Select ongoing research (internships, theses) projects in the area of embodied language understanding, cognitive vision, spatial reasoning, and relational learning.

**15:00 - 15:20**  
**COFFEE BREAK**

**15:20 - 17:40**  
**SESSION 3 — EVIDENCE BASED DESIGN**  
Groups of students presents results from semester long projects broadly aimed at the interpretation and / or synthesis of embodied visual / visuo-locomotive user experience. Applications addressed include domains such as architecture, film, immersive reality.

**18:30 Onwards**  
**DINNER (Informal)**

Details
Multi-Modal Emotion Recognition
  Michael Speer (Computer Science), Dustin Hesse (Media Culture)

The Perception of the Moving Image
  Yuki Noda (Engineering, UEC Japan), Rocío Varela (Digital Media)

Sentiment Analysis
  Roshan Bharadwaj (Medienkultur), Andreas Grabski (Computer Science)

Natural Interaction - Challenges and Attempts to Solve Them
  Johanna Arens (Digital Media), Amelie Unger (Digital Media)

Brain Computer Interfaces
  Axel Janis Simon Meyer (Computer Science)

Commonsense Reasoning
  Mariam Asaad (Computer Science)

Cognitive Vision
  Markus Prinzler (Computer Science), Tom Vincent Peters (Computer Science)

Machine Learning and Logic Programming
  Matthis Laudan (Digital Media), Michel Zimmer (Digital Media)

Neural-Symbolic Learning Systems
  Marvin Lange (Digital Media), Max Spliethöver (Digital Media)
SESSION 2 of 3 — RESEARCH PROJECTS IN LANGUAGE, VISION, AND LEARNING

COGNITIVE VISION — Movement Segmentation and Clustering for Action Recognition
Katherine Huang (Computer Science, University of Toronto, Canada)

VISUAL COMPUTING — Semantic Q/A with Point-Clouds (with Constraint Logic Programming)
Thomas Hudkovic (Computer Science University of Bremen, Germany)

NEURO-SYMBOLIC LEARNING — On Deep Learning with Deep Semantics
Tobias Torkler (Computer Science, University of Bremen, Germany)

EMBODIED CONSTRUCTION GRAMMAR — On Image Schematic Interpretation
Samantha Bhuiyan (Computer Science, Cal Poly, United States)

COGNITIVE FILM STUDIES — On Systematic Visuo-Auditory Interpretation of Film and its Reception
Rocío Varela (Digital Media University of Bremen, Germany)
SESSION 3 of 3 — EVIDENCE BASED DESIGN

Behavioral Analysis of Two Wayfinding Tasks for Architectural Design Evaluation  
Inga Lehne  (Digital Media)

Accessible Space for Visually Impaired and Blind People  
Gabriel Lambers, Christian Pfaab, Md. Mamunuzzaman  (Computer Science, and Digital Media)

The Use of Visual Compositions in the Moving Image: The Case of (A)Symmetry  
Alina Panova, Johanna Arens, Mariam Assad, Rocío Varela  (Digital Media., and Computer Science)

Applying Cinematic Techniques in VR: An Approach Towards Transforming Immersive Environment into a Cinematic Platform  
Hubert Kloskowski, Valentin Kraft, Matthieu Liénart, Omar Moussa, Daniele Tatasciore  (Digital Media., UniBremen and HfK Bremen)

Analyzing the Influence of Navigational Help in Video Games on Player Wayfinding and Immersion  
Kim Korsching, Stefan Finke, Roman Arzaroli  (Digital Media., and Computer Science)

Measuring Empathy in 360° Immersive Documentary Films  
Sk. Nahiduzzaman, Paulina Cortés  (Digital Media., UniBremen and HfK Bremen)

Indoor Navigation of Visually Impaired and Blind at the Cinema  
Abdur Rahman, Roksolana Pleshkanovska  (Digital Media)