

# Human-centered Intelligent User Interfaces MAI648

## **Assignment 03**

Analysis, Report and Presentation of a Research Paper in Intelligent User Interfaces

Group Assignment

## **Description**

This is a group assignment, which needs to be completed with the same group members since the initial group formations for the course's group projects.

In this assignment you are asked to choose one of the following research papers in the area of Intelligent User Interfaces, and create and submit the following:

- 1. Report (4-5 pages, approximately 1200 words) including a summary of the work, critical analysis of the work, its relevance and contribution to the area of Intelligent User Interfaces.
- PowerPoint-like presentation in which you will present the outcomes of this work on Week
   The presentations should be planned to take 20 minutes. All members of the group should present the work.

### **Submission Guidelines**

Please submit your report to the relevant submission link in the E-Class system of our course.

#### **Assessment**

This assignment has a 10% weight on the overall grade in this course, from which the report has a weight of 6%, and the presentation a weight of 4%.

#### **Important Dates**

Exercise Announcement: Week 7 – 19/10/2022

Exercise Submission Deadline: Week 10 - 09/11/2022, 15:00

#### **Papers**

1. Sarah Theres Völkel, Samantha Meindl, and Heinrich Hussmann. 2021. Manipulating and Evaluating Levels of Personality Perceptions of Voice Assistants through Enactment-Based Dialogue Design. To





- appear in Proceedings of the 2021 Conference on Conversational User Interfaces (CUI '21). ACM, New York, NY, USA.
- Sven Mayer, Gierad Laput, and Chris Harrison. 2020. Enhancing Mobile Voice Assistants with WorldGaze. In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (CHI '20). Association for Computing Machinery, New York, NY, USA, 1–10. DOI: https://doi.org/10.1145/3313831.3376479
- 3. Mingrui Ray Zhang, Ruolin Wang, Xuhai Xu, Qisheng Li, Ather Sharif, and Jacob O. Wobbrock. 2021. Voicemoji: Emoji Entry Using Voice for Visually Impaired People. In Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems (CHI '21). Association for Computing Machinery, New York, NY, USA, Article 37, 1–18. <a href="https://doi.org/10.1145/3411764.3445338">https://doi.org/10.1145/3411764.3445338</a>
- Sarah Theres Völkel, Penelope Kempf, and Heinrich Hussmann. 2020. Personalised Chats with Voice Assistants: The User Perspective. In Proceedings of the 2nd Conference on Conversational User Interfaces (CUI '20). ACM, New York, NY, USA. <a href="https://doi.org/10.1145/3405755.3406156">https://doi.org/10.1145/3405755.3406156</a>
- Zihan Wu, Chun Yu, Xuhai Xu, Tong Wei, Tianyuan Zou, Ruolin Wang, and Yuanchun Shi. 2021. LightWrite: Teach Handwriting to The Visually Impaired with A Smartphone. In Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems (CHI '21). Association for Computing Machinery, New York, NY, USA, Article 32, 1–15. <a href="https://doi.org/10.1145/3411764.3445322">https://doi.org/10.1145/3411764.3445322</a>
- Steichen, B., Wu, M. M. A., Toker, D., Conati, C., Carenini, G. (2014). Te,Te,Hi,Hi: Eye Gaze Sequence Analysis for Informing User-Adaptive Information Visualizations. User Modeling, Adaptation, and Personalization (UMAP 2014), Springer, 183-194, doi: <a href="https://doi.org/10.1007/978-3-319-08786-3">https://doi.org/10.1007/978-3-319-08786-3</a> 16
- 7. Katsini, C., Fidas, C., Raptis, G., Belk, M., Samaras, G., Avouris, N. (2018). Influences of Human Cognition and Visual Behavior on Password Strength during Picture Password Composition. ACM CHI 2018, ACM Press, paper 87, doi: <a href="https://doi.org/10.1145/3173574.3173661">https://doi.org/10.1145/3173574.3173661</a>
- 8. Vail, A.K., Boyer, K.E., Wiebe, E.N., Lester, J. (2015). The Mars and Venus Effect: The Influence of User Gender on the Effectiveness of Adaptive Task Support, User Modeling, Adaptation, and Personalization (UMAP 2015), Springer, 265-276, doi: https://doi.org/10.1007/978-3-319-20267-9 22
- Alves, P., Saraiva, P., Carneiro, J., Campos, P., Martins, H., Novais, P., Marreiros, G. (2020). Modeling Tourists' Personality in Recommender Systems: How Does Personality Influence Preferences for Tourist Attractions? ACM User Modeling, Adaptation, and Personalization (UMAP 2020), ACM Press, 4-13. doi: https://doi.org/10.1145/3340631.3394843
- Herbig, N., Düwel, T., Helali, M., Eckhart, L., Schuck, P., Choudhury, S., Krüger, A. (2020). Investigating Multi-Modal Measures for Cognitive Load Detection in E-Learning. ACM User Modeling, Adaptation, and Personalization (UMAP 2020), ACM Press, 88-97. doi: https://doi.org/10.1145/3340631.3394861
- Prateek Panwar and Christopher M. Collins. 2018. Detecting Negative Emotion for Mixed Initiative Visual Analytics. In Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems (CHI EA '18). ACM, New York, NY, USA, Paper LBW004, 6 pages. DOI: https://doi.org/10.1145/3170427.3188664
- 12. Raquel Robinson, John Murray, and Katherine Isbister. 2018. "You're Giving Me Mixed Signals!": A Comparative Analysis of Methods that Capture Players' Emotional Response to Games. In Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems (CHI EA '18). ACM, New York, NY, USA, Paper LBW567, 6 pages. DOI: <a href="https://doi.org/10.1145/3170427.3188469">https://doi.org/10.1145/3170427.3188469</a>



