# KATHARINA REINECKE

Paul G. Allen School of Computer Science & Engineering, University of Washington reinecke@cs.washington.edu

# **EDUCATIONAL HISTORY**

# University of Zurich, Zurich, Switzerland

May 2010

Ph.D. Computer Science (summa cum laude)

Advisors: Prof. Abraham Bernstein & Dr. Anthony Jameson

Dissertation: Culturally Adaptive User Interfaces

# University of Koblenz, Koblenz, Germany

March 2006

Diploma Computer Science (with high distinction) Advisors: Prof. Jürgen Krause & Prof. Dieter König

Thesis: A Learning Platform for Agricultural Advisers in Rwanda

# **EMPLOYMENT HISTORY**

### **University of Washington**

September 2019 – present

Associate Professor, Paul G. Allen School of Computer Science & Engineering Adjunct Associate Professor, Human-Centered Design & Engineering

## **University of Washington**

August 2015 – September 2019

Assistant Professor, Paul G. Allen School of Computer Science & Engineering Adjunct Assistant Professor, Human-Centered Design & Engineering

#### University of Michigan

January 2014 – July 2015

Assistant Professor, School of Information Adjunct Assistant Professor, Computer Science

#### **Harvard University**

November 2010 - November 2013

Postdoctoral Fellow, Computer Science

Advisor: Prof. Krzysztof Gajos

#### **University of Zurich**

May 2006 – May 2010

Graduate Student Researcher, Institute for Informatics

Advisor: Prof. Abraham Bernstein

# AWARDS AND HONORS

Best Paper Honorable Mention Award, 2023, ACM CHI Conference

Best Paper Award, 2021, ACM ASSETS Conference

Best Paper Honorable Mention Award, 2021, ACM CHI Conference

Best Paper Honorable Mention Award, 2018, ACM CSCW Conference

Last updated: April 2023

Madrona Prize, 2017, Madrona Venture Group

Best Paper Award, 2017, ACM CHI Conference

Best Paper Award, 2016, ACM CHI Conference

Best Paper Honorable Mention Award, 2015, ACM CSCW Conference

European Research Paper of the Year Award, 2014, European Network of CIOs, CIO City

Best Paper Honorable Mention Award, 2013, ACM CHI Conference

RepliCHI Award, 2013, ACM CHI Conference

Best Paper Award, 2013, ACM CHI Conference

Mercator Prize, 2011, Mercator Foundation

Best Dissertation Award Finalist, 2010, German, Swiss, and Austrian ACM

Best Paper Award, 2009, ACM UMAP Conference

Swiss Computer Science Challenge Award, 2008, Hasler Foundation

Best Student Award, 2007, ISWC Conference Doctoral Consortium

# FUNDING & FELLOWSHIPS

NSF CISE:CHS grant, 2023-2026. World values of conversational AI and the consequences for Human-AI Interaction. Co-PIs: Maarten Sap (CMU), Andrew Meltzoff (UW Psychology)

Vaccine Confidence Fund, 2021-2022. Large-scale studies to advance public's access and trust of COVID-19 vaccine research on social media. Co-Pied with Gary Hsieh (UW HCDE) and Joshua Liao (UW Medicine),

Google Faculty Research Award, 2021. Providing science-backed answers to health-related questions in Google search.

NSF CISE:CHS grant, 2020-2023. Exploring and predicting unintended consequences of technology.

Facebook "Economic Opportunity and Digital Platforms" Research award, 2019. Perceptions of Internet-based Technologies among Rural and Urban Americans. Co-Pled with Kurtis Heimerl.

Microsoft Research Award, 2019-2020. A Virtual Chinrest for measuring crowding.

Google Faculty Research Award, 2019-2020. Effects of language formality in security-related user interfaces. Co-Pled with Franziska Roesner and Tadayoshi Kohno.

Microsoft Research Award, 2018-2019. Big data in dyslexia assessment. Co-PI: Jason Yeatman.

CoMotion Innovation Fund, 2018-2019. Augury project.

Adobe Data Science Research Award, 2018. Predicting the Visual Appeal and Memorability of Marketing Emails.

Adobe Data Science Research Award, 2017. Data-driven prediction of website trustworthiness around the world.

NSF CAREER Award, 2016-2022. CAREER: Data-driven user interface designs for culturally diverse groups.

Microsoft Research Award, 2015-2016. Assessing color differentiability through Labinthe Wild.

Google Faculty Research Award, 2014-2015. Predicting visual appeal and user engagement.

Swiss National Science Foundation, 2013-2013. Advanced research fellowship.

Swiss National Science Foundation, 2011-2013. Research fellowship.

Hasler Foundation, 2010-2011. Co-authored with Prof. Bernstein.

Hasler Foundation, 2008-2010. Co-authored with Prof. Bernstein.

University of Zurich, 2008-2009. Research Fellowship.

German Academic Exchange Service (DAAD), 2005. Research scholarship for 6-months research stay in Rwanda.

### **PUBLICATIONS**

#### **Peer-reviewed Publications**

- 1. Joshua Eli Rosen, Sylvia Seo Eun Chang, Spencer Williams, Joy S Lee, DaHee Han, Nidhi Agrawal, Joseph Joo, Gary Hsieh, **Katharina Reinecke**, Joshua Liao. "Association between Risk Communication Format and Perceived Risk of Adverse Events after COVID-19 Vaccination". *Healthcare*, 2023.
- Sebastin Santy, Jenny Liang, Ronan Le Bras, Katharina Reinecke, and Maarten Sap, "NLPositionality: Measuring Design Biases and Positionality of Datasets and Models", Workshop on Cross-Cultural Considerations in NLP at EACL, 2023. (to appear)
- 3. Rock Yuren Pang, Kimberly Do, Jiachen Jiang, and **Katharina Reinecke**. "That's important, but...": How Computer Science Researchers Anticipate Unintended Consequences of Their Research Innovations. *Human Factors in Computing Systems (CHI)*, 2023.
- 4. Jackson Stokes, Tal August, Robert A. Marver, Alexei Czeskis, Franziska Roesner, Tadayoshi Kohno, and **Katharina Reinecke**. How Language Formality in Security and Privacy Interfaces Impacts Intended Compliance. *Human Factors in Computing Systems (CHI)*, 2023.
- 5. Yiqun T. Chen, Angela D.R. Smith, **Katharina Reinecke**, and Alexandra To. Why, when, and from whom: considerations for collecting and reporting race and ethnicity data in HCI. *Human Factors in Computing Systems (CHI)*, 2023. **HONORABLE MENTION AWARD**
- 6. Rock Yuren Pang and Katharina Reinecke. Anticipating Unintended Consequences of Technology Using Insights from Creativity Support Tools. To Appear in *Design & Policy Workshop @ CHI '23. Hamburg, Germany, April 2023*.
- 7. Ather Sharif, Andrew Mingwei Zhang, **Katharina Reinecke**, and Jacob Wobbrock. Understanding and Improving Drilled-Down Information Extraction From Online Data Visualizations for Screen-Reader Users. International Web for All Conference (W4A), 2023.

- 8. David M. Greenberg, Varun Warrier, Carrie Allison, Krzysztof Z. Gajos, **Katharina Reinecke**, Ahmad Abu-Akel, Peter J. Rentfrow, & Simon Baron-Cohen. Sex and age differences in 'theory of mind' across 57 countries using the English version of 'Reading the Mind in the Eyes' test (2023). *Proceedings of the National Academy of Sciences (PNAS)*, 120(1).
- 9. Spencer Williams, Joy Lee, Brett A. Halperin, Joshua M. Liao, Gary Hsieh and **Katharina Reinecke**. Meta-Summaries Effective for Improving Awareness and Understanding of COVID-19 Vaccine Safety Research (2022). *Nature Scientific Reports*. (12,19987)
- 10. Inna Wanyin Lin, Lucille Njoo, Anjalie Field, Ashish Sharma, **Katharina Reinecke**, Tim Althoff, Yulia Tsvetkov. Gendered Mental Health Stigma in Masked Language Models. *Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2022.
- 11. Spencer Williams, Ridley Jones, **Katharina Reinecke**, and Gary Hsieh. An HCI Research Agenda for Online Science Communication. *Proceedings of the ACM on Human Computer Interaction (PACM HCI)*, 2022.
- 12. Tal August, **Katharina Reinecke**, and Noah Smith. Generating Scientific Definitions with Controllable Complexity. *Annual Meeting of the Association for Computational Linguistics* (ACL), 2022.
- 13. Yiqun Chen, Angela D. R. Smith, **Katharina Reinecke**, and Alexandra To. Collecting and Reporting Race and Ethnicity Data in HCI. *Human Factors in Computing Systems (CHI)*, Late-Breaking Work, 2022.
- 14. Ather Sharif, Andrew Mingwei Zhang, Anna Shih, Jacob O. Wobbrock, and **Katharina Reinecke**. Understanding and Improving Information Extraction From Online Geospatial Data Visualizations for Screen-Reader Users. *ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)*, pp. 1-5. 2022.
- 15. Ather Sharif, Olivia H. Wang, Alida T. Muongchan, **Katharina Reinecke**, and Jacob O. Wobbrock. VoxLens: Making Online Data Visualizations Accessible With an Interactive JavaScript Plug-In. *Human Factors in Computing Systems (CHI)*, 2022
- 16. Yuren Pang, **Katharina Reinecke**, and Rene Just. Apéritif: Scaffolding Preregistrations to Automatically Generate Analysis Code and Methods Descriptions, *Human Factors in Computing Systems (CHI)*, 2022.
- 17. Ather Sharif, Sanjana S. Chintalapati, Jacob O. Wobbrock, and **Katharina Reinecke**. Understanding Screen-Reader Users' Experiences with Online Data Visualizations. *ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)*, 2021.
- 18. Qisheng Li, Josephine Lee, Christina Zhang, and **Katharina Reinecke**. How Online Tests Contribute to the Support System for People With Cognitive and Mental Disabilities. *ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)*, 2021. **BEST PAPER AWARD**
- 19. Danielle Bragg, **Katharina Reinecke**, and Richard Ladner. Expanding a Large Inclusive Study of Human Listening Rates. *ACM Transactions on Accessible Computing*, 14(3), 1-26, 2021.
- 20. Rodolfo C. Barragan, Nigini Oliveira, Koosha Khalvati, Rachel Brooks, **Katharina Reinecke**, Rajesh Rao, and Andrew N. Meltzoff. Identifying with all humanity predicts cooperative health behaviors and helpful responding during COVID-19. *PLOS One*, 16(3), 2021.

- 21. Amanda Baughan, Nigini Oliveira, Tal August, Naomi Yamashita, and **Katharina Reinecke**. Do Cross-Cultural Differences in Visual Attention Patterns Affect Search Efficiency on Websites? *Human Factors in Computing Systems (CHI)*, 2021. **HONORABLE MENTION AWARD**
- 22. Sebastian Linxen, Christian Sturm, Florian Bruehlmann, Vincent Cassau, Klaus Opwis, and **Katharina Reinecke.** How WEIRD is CHI? *Human Factors in Computing Systems (CHI)*, 2021.
- 23. Tal August, Dallas Card, Gary Hsieh, Noah Smith, and **Katharina Reinecke**. Explain like I am a Scientist: The Linguistic Barriers of Entry to r/science. *Human Factors in Computing Systems (CHI)*, 2020.
- 24. Tal August, Lauren Kim, **Katharina Reinecke**, and Noah Smith. Writing Strategies for Science Communication: Data and Computational Analysis. *Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2020.
- 25. Tal August, Maarten Sap, Elizabeth Clark, **Katharina Reinecke**, and Noah Smith. Exploring the Effect of Author and Reader Identity in Online Story Writing: the STORIESINTHEWILD Corpus, *ACL Workshop on Narrative Understanding, Storylines, and Events (NUSE)*, 2020.
- 26. Ather Sharif, Victoria Pao, **Katharina Reinecke**, and Jacob O. Wobbrock. The Reliability of Fitts's Law as a Movement Model for People with and without Limited Fine Motor Function. *Proceedings of the ACM Conference on Computers and Accessibility*, 2020.
- 27. Amanda Baughan, Tal August, Naomi Yamashita, and **Katharina Reinecke**. Keep it Simple: How Visual Complexity and Preferences Impact Search Efficiency on Websites. *Human Factors in Computing Systems (CHI)*, 2020.
- 28. Qisheng Li, Sung Jun Joo, Jason D. Yeatman, and **Katharina Reinecke**. Controlling for Participants' Viewing Distance in Large-Scale, Psychophysical Online Experiments Using a Virtual Chinrest. *Nature Scientific Reports* 10 (904), 2020.
- 29. Krzysztof Z. Gajos, **Katharina Reinecke**, Mary Donovan, Christopher D. Stephen, Albert Y. Hung, Jeremy D. Schmahmann, and Anoopum S. Gupta. Computer Mouse Use Captures Ataxia and Parkinsonism, Enabling Accurate Measurement and Detection. *Movement Disorders*, 35 (2), 2020.
- 30. Laura Germine, **Katharina Reinecke**, and Naomi S. Chaytor. Digital neuropsychology: Challenges and opportunities at the intersection of science and software. *The Clinical Neuropsychologist*, 33(2), p. 271-286, 2019.
- 31. Eunice Jun, Maureen Daum, Jared Roesch, Sarah Chasins, Emery Berger, Rene Just, and **Katharin Reinecke**. Tea: A High-level Language and Runtime System for Automating Statistical Analysis. *User Interfaces, Software & Technology (UIST)*, 2019.
- 32. Tal August and **Katharina Reinecke**. Pay Attention, Please: Formal Language Improves Attention in Volunteer and Paid Online Experiments. *Human Factors in Computing Systems (CHI)*, 2019.
- 33. Qisheng Li, Meredith Ringel Morris, Adam Fourney, Kevin Larson, and **Katharina Reinecke.** The Impact of Web Browser Reader Views on Reading Speed and User Experience. *Human Factors in Computing Systems (CHI)*, 2019.
- 34. Qisheng Li, Krzysztof Z. Gajos, and **Katharina Reinecke.** Volunteer-Based Online Studies With Older Adults and People with Disabilities, *ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)*, 2018.

- 35. Tal August, Nigini Oliveira, Chenhao Tan, Noah Smith, and **Katharina Reinecke**. Framing effects: Choice of slogans used to advertise online experiments can boost recruitment and lead to sample biases. *Proceedings of the ACM on Human-Computer Interaction 2, no. CSCW*, p. 1-19, 2018.
- 36. Nigini Oliveira, Michael Muller, Nazareno Andrade, and **Katharina Reinecke**. The exchange in StackExchange: Divergences between Stack Overflow and its culturally diverse participants. *Proceedings of the ACM on Human-Computer Interaction 2, no. CSCW*, p. 1-22, 2018.
- 37. Eunice Jun, Blue A. Jo, Nigini Oliveira, and **Katharina Reinecke**. Digestif: Promoting science communication in online experiments. *Proceedings of the ACM on Human-Computer Interaction 2, no. CSCW*, p. 1-26, 2018.
- 38. Eunice Jun, Morelle Arian, and **Katharina Reinecke**. The potential for scientific outreach and learning in Mechanical Turk experiments. *ACM Conference on Learning at Scale*, pp. 1-10. 2018.
- 39. Danielle Bragg, Cynthia Bennett, **Katharina Reinecke**, and Richard Ladner. A Large Inclusive Study of Human Listening Rates. *Human Factors in Computing Systems (CHI)*, 2018.
- 40. Manuel Nordhoff, Tal August, Nigini A. Oliveira, and **Katharina Reinecke**. A case for design localization: Diversity of website aesthetics in 44 countries. *Human Factors in Computing Systems (CHI)*, pp. 1-12. 2018.
- 41. Judith Yaaqoubi and **Katharina Reinecke**. The use and usefulness of cultural dimensions in product development. Conference on Human Factors in Computing Systems (CHI), Case Study, pp. 1-9. 2018.
- 42. Joshua K. Hartshorne, Josh de Leeuw, Laura T. Germine, **Katharina Reinecke**, and Mariela Jennings. Massive Online Experiment in Cognitive Science. In CogSci. 2018.
- 43. Kyle Thayer, Philip J. Guo, and **Katharina Reinecke**. The Impact of Culture on Learner Behavior in Visual Debuggers. *IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC)*, pp. 115-124. IEEE, 2018.
- 44. Eunice Jun, Gary Hsieh, and **Katharina Reinecke**. Types of motivation affect study selection, attention, and dropouts in online experiments. *Proceedings of the ACM on Human-Computer Interaction 1, no. CSCW*, p. 1-15, 2017.
- 45. Yeaseul Kim, **Katharina Reinecke**, and Jessica Hullman. Data Through Others' Eyes: The Impact of Visualizing Others' Expectations on Visualization Interpretation. *IEEE InfoVis*, 2017.
- 46. Yeaseul Kim, **Katharina Reinecke**, and Jessica Hullman. Explaining the Gap: Visualizing One's Predictions Improves Recall and Comprehension of Data. *Human Factors in Computing Systems (CHI)*, 2017. Acceptance: 25%. **BEST PAPER AWARD**
- 47. Moser, Carol, Chanda Phelan, Paul Resnick, Sarita Y. Schoenebeck, and **Katharina Reinecke**. No such thing as too much chocolate: evidence against choice overload in ecommerce. *Human Factors in Computing Systems (CHI)*, pp. 4358-4369. 2017.
- 48. Nigini Oliveira, Eunice Jun, and **Katharina Reinecke**. Citizen science opportunities in volunteer-based online experiments. *Human factors in computing systems (CHI)*, pp. 6800-6812. 2017.

- 49. Bernd Huber, **Katharina Reinecke**, and Krzysztof Z. Gajos. The effect of performance feedback on social media sharing at volunteer-based online experiment platforms. *Human Factors in Computing Systems (CHI)*, pp. 1882-1886. 2017.
- 50. Daniel M. Romero, **Katharina Reinecke**, and Lionel P. Robert Jr. The influence of early respondents: information cascade effects in online event scheduling. *ACM International Conference on Web Search and Data Mining*, pp. 101-110. 2017.
- 51. Nigini Oliveira, Nazareno Andrade, and **Katharina Reinecke**. Participation differences in Q&A sites across countries: opportunities for cultural adaptation. *Nordic Conference on Human-Computer Interaction*, pp. 1-10. 2016.
- 52. **Katharina Reinecke**, David Flatla, and Christopher Brooks. Enabling Designers to Foresee Which Colors Users Cannot See. *Human Factors in Computing Systems (CHI)*, 2016. Acceptance: 23.4%. **BEST PAPER AWARD**
- 53. Carol Moser, Sarita Y. Schoenebeck, and **Katharina Reinecke**. Technology at the table: Attitudes about mobile phone use at mealtimes. *Human Factors in Computing Systems (CHI)*, pp. 1881-1892. 2016.
- 54. **Katharina Reinecke**, Krzysztof Gajos. LabintheWild: Conducting Large-Scale Online Experiments With Uncompensated Samples. *Computer Supported Cooperative Work (CSCW)*, 2015. Acceptance: 28.3%. **HONORABLE MENTION AWARD**
- 55. Lane Harrison, **Katharina Reinecke**, and Remco Chang. Infographic aesthetics: Designing for the first impression. *Human Factors in Computing Systems (CHI)*, pp. 1187-1190. 2015.
- 56. Anthony Jameson, Bettina Berendt, Silvia Gabrielli, Federica Cena, Cristina Gena, Fabiana Vernero, and **Katharina Reinecke**. Choice architecture for human-computer interaction. *Foundations and Trends in Human–Computer Interaction* 7, no. 1–2: 1-235, 2014.
- 57. **Katharina Reinecke**, Krzysztof Gajos. Quantifying Visual Preferences Around the World. *Human Factors in Computing Systems (CHI)*, 2014. Acceptance: 22.8%.
- 58. Philip J. Guo and Katharina Reinecke. Demographic differences in how students navigate through MOOCs. *ACM Conference on Learning at Scale*, pp. 21-30. 2014.
- 59. **Katharina Reinecke**, Tom Yeh, Luke Miratrix, Yen Zhao, Mardiko Rahmatri, Jenniger Liu, Krzysztof Gajos. Predicting Users' First Impressions of Website Aesthetics With a Quantification of Perceived Visual Complexity and Colorfulness. *Human Factors in Computing Systems (CHI)*, 2013. Acceptance: 20%. **HONORABLE MENTION AWARD**
- 60. David Flatla, **Katharina Reinecke**, Carl Gutwin, Krzysztof Gajos. SPRWeb: Preserving Subjective Responses to Website Color Schemes Through Automatic Recoloring. *Human Factors in Computing Systems (CHI)*, 2013. Acceptance: 20%. **BEST PAPER AWARD**
- 61. Steve Komarov, **Katharina Reinecke**, Krzysztof Gajos (2013). Crowdsourcing Performance Evaluations. *Human Factors in Computing Systems (CHI)*. Acceptance: 20%. **REPLICHI AWARD**
- 62. **Katharina Reinecke**, Minh-Khoa Nguyen, Abraham Bernstein, Michael Naef, and Krzysztof Gajos. Doodle Around the World: Online Scheduling Behavior Reflects Cultural Differences in Time Perception and Group Decision-Making. *ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW*), 2013.

- 63. **Katharina Reinecke** and Abraham Bernstein. Knowing what a user likes: A design science approach to interfaces that automatically adapt to culture. MIS Quarterly, p. 427-453, 2013. **BEST EUROPEAN RESEARCH PAPER OF THE YEAR AWARD**
- 64. Krzysztof Gajos, **Katharina Reinecke**, and Charles Herrman. Accurate Measurements of Pointing Performance from In Situ Observations. *Human Factors in Computing Systems (CHI)*, 2012. Acceptance: 23%.
- 65. Katharina Reinecke. Automatic adaptation of user interfaces to cultural preferences. IT-Information Technology 54, no. 2, p. 96-100, 2012.
- 66. Anthony Jameson, Silvia Gabrielli, Per Ola Kristensson, **Katharina Reinecke**, Federica Cena, Christina Gena, and Fabiana Vernero. How Can We Support Users' Preferential Choice? *Human Factors in Computing Systems (CHI)*, alt.chi, 2011.
- 67. **Katharina Reinecke** and Krzysztof Gajos. One size fits many Westerners: How Cultural Abilities Challenge UI Design. In *Workshop on Dynamic Accessibility: Accommodating Differences in Ability and Situation, Human Factors in Computing Systems (CHI)*, 2011.
- 68. **Katharina Reinecke** and Abraham Bernstein. Improving performance, perceived usability, and aesthetics with culturally adaptive user interfaces. *ACM Transactions on Computer-Human Interaction (TOCHI)* 18, no. 2, p. 1-29, 2011.
- 69. **Katharina Reinecke**, Abraham Bernstein, and Sonja Schenkel. Modeling a user's culture. In *Handbook of research on culturally-aware information technology: Perspectives and models*, pp. 242-264. IGI Global, 2011.
- Katharina Reinecke and Abraham Bernstein. Tell me Where You've Lived and I'll Tell You What You Like: Adapting Interfaces to Cultural Preferences. ACM Conference on User Modeling, Adaptation, and Personalization (UMAP), 2009. Acceptance: 26.1%. BEST PAPER AWARD
- 71. **Katharina Reinecke**, Abraham Bernstein, and Stefanie Hauske (2008). To Make or to Buy? Sourcing Decisions at Zurich Cantonal Bank. *International Conference on Information Systems (ICIS)*, 2008. Acceptance: 20%
- 72. **Katharina Reinecke**, Gerald Reif, and Abraham Bernstein. Cultural User Modeling With CUMO: An Approach to Overcome the Personalization Bootstrapping Problem. In *Workshop on Cultural Heritage Systems in the Semantic Web*; Lecture Notes in Computer Science, Springer, 2007.
- 73. **Katharina Reinecke** and Abraham Bernstein. Culturally Adaptive Software: Moving Beyond Internationalization. *International Conference on Human-Computer Interaction*, 2007.
- 74. Hülya Topcuoglu, Katharina Reinecke, Stefanie Hauske, and Abraham Bernstein. CaseML Enabling Multifaceted Learning Scenarios with a Flexible Markup Language for Business Case Studies. *International Conference on EdMedia*, 2007.
- 75. **Katharina Reinecke**, Hülya Topcuoglu, Stefanie Hauske, and Abraham Bernstein. Flexibilisierung der Lehr- und Lernszenarien von Business-Fallstudien durch CaseML. *E-Learning Fachtagung Informatik (DeLFI)*, Lecture Notes in Informatics, 2007.

# **Workshop Organization**

- 1. Joshua Hartshorne, Joshua De Leeuw, Laura Germine, **Katharina Reinecke**, and Mariela Jennings. Massive Online Experiments in Cognitive Science. *Annual Meeting of the Cognitive Science Society (CogSci)*, 2018.
- 2. Christian Sturm, Alice Oh, Sebastian Linxen<sup>1</sup>, Jose Abdelnour-Nocera, Susan Dray, and **Katharina Reinecke**. How WEIRD is HCI? Extending HCI Principles to other Countries and Cultures. In *Human Factors in Computing Systems (CHI)*, 2015.
- 3. Pamela Hinds and **Katharina Reinecke**. Advancing Methodologies for Cross-Cultural Studies of Collaborative Systems. In *Computer Supported Cooperative Work and Social Computing (CSCW)*, 2014.
- 4. **Katharina Reinecke**, David Flatla, Erin Solovey, Carl Gutwin, Krzysztof Gajos, and Jeffrey Heer. Many People, Many Eyes: Aggregating Influences of Visual Perception on User Interface Design. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI)*, 2013.

### Posters, demos, and doctoral consortia

#### Extended Abstracts / Posters

- 1. Lior Levy, Qisheng Li, Ather Sharif, **Katharina Reinecke**. Respectful Language as Perceived by People with Disabilities. *ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)*, Poster, 2021.
- 2. Krzysztof Gajos, **Katharina Reinecke**, Mary Donovan, Jeremy Schmahmann, and Anoopum Gupta. Machine Prediction of Ataxia Severity and Class from a Simple Mouse-based Computer Task. Annual Ataxia Conference, Poster, 2018.
- 3. Teng Ye, **Katharina Reinecke**, and Lionel P. Robert Jr. Personalized feedback versus money: the effect on reliability of subjective data in online experimental platforms. *ACM Conference on Computer Supported Cooperative Work and Social Computing, Companion*, pp. 343-346. 2017.
- 4. **Katharina Reinecke** and Abraham Bernstein. Predicting user interface preferences of culturally ambiguous users. *Human Factors in Computing Systems (CHI)*, Extended Abstracts, pp. 3261-3266. 2008.

#### Demos

- Nigini Oliveira<sup>3</sup>, Eunice Jun<sup>1</sup>, Trevor Croxson, Krzysztof Gajos, and Katharina Reinecke. LabintheWild: How to Design Uncompensated, Feedback-driven Online Experiments. Computer Supported Cooperative Work and Social Computing (CSCW) Companion, 2017.
- 2. **Katharina Reinecke**, Abraham Bernstein, and Patrick Minder. MOCCA A System That Learns and Recommends Visual Preferences Based on Cultural Similarity. International Conference on Intelligent User Interfaces (IUI), 2011.

#### Doctoral Consortiums

- 1. **Katharina Reinecke**. Culturally Adaptive User Interfaces, In *Proceedings of the International Conference of Information Systems (ICIS)*. Doctoral Consortium. 2009.
- 2. **Katharina Reinecke**. Cultural Adaptivity for the Semantic Web. In *Proceedings of the International Semantic Web Conference (ISWC)*. Doctoral Consortium. Lecture Notes in Computer Science, Springer. 2007 **BEST STUDENT AWARD**

# SOFTWARE SYSTEMS

- \* denotes systems that my lab still actively maintains
- 1. BLIP\* (<a href="https://blip.labinthewild.org/">https://blip.labinthewild.org/</a>): Web-based system that extracts and summarizes unintended consequences of technology from online articles using NLP techniques, sorts them into categories, and lets users read and comment on them.
- 2. Virtual Chinrest\*: Javascript library for estimating a person's distance from the screen (viewing distance) based on their blind spot.
- 3. Juxtapose\* (<a href="http://juxtapose.labinthewild.org">http://juxtapose.labinthewild.org</a>): Web-based system that enables designers to compare websites from various countries, quantifying differences between websites using a set of image metrics.
- 4. Augury\* (http://augurydesign.com): Web-based system that predicts website appeal.
- 5. ColorCheck\*. Command-line system that predicts which colors in an image (such as a website screenshot) will be differentiable to users in varying lighting conditions.
- 6. LabintheWild\* (<a href="http://www.labinthewild.org">http://www.labinthewild.org</a>): Volunteer-based experiment platform that has been in use since 2012 by my lab and many other researchers. An average of 1,000 participants/day.
- 7. LabintheWild Templates\* (<a href="http://template.labinthewild.org">http://template.labinthewild.org</a>): Experiment templates for conducting online experiments on LabintheWild and other platforms. Designed for use by psychology researchers and others with potentially little knowledge of web programming.
- 8. LabintheWild Tutorial\* (<a href="http://tutorial.labinthewild.org">http://tutorial.labinthewild.org</a>). Tutorial for conducting volunteer-based online experiments.
- 9. Apéritif: Web-based system that overlays with the preregistration website AsPredicted.org to scaffold the preregistration process.
- 10. VoxLens: Javascript-plugin for making online data visualizations accessible for screenreader users.
- 11. Hevelius: Web-based system that supports physicians in assessing the type and severity of motor impairments, such as ataxia and parkinsonism. Has been tested with more than 200 patients at Massachusetts General Hospital.
- 12. Tea: A High-level Language and Runtime System for Automating Statistical Analysis
- 13. Digestif: Web-based system that support researchers in providing science communication and outreach information to their online participants.
- 14. SPRWeb: System that recolors websites to improve color differentiability while preserving users' emotional response to colors.

15. MOCCA: Culturally-adaptive system that automatically rearranges user interface components based on a users' cultural background and adjusts adaptation rules over time.

# **TEACHING**

# **University of Washington**

- CSE 440: Introduction to HCI (Spring 2016, Spring 2017, Winter 2018, Fall 2019, Fall 2020, Winter 2022)
- CSE 581: Computer Ethics (Winter 2021, Fall 2021)
- CSE 481: HCI Capstone (Winter 2017, Spring 2020, Spring 2021)
- CSE 441: Advanced HCI, jointly offered with DESIGN 372 (Spring 2018, Spring 2019)
- CSE 599: Crowdsourcing Graduate Seminar (Winter 2017, Winter 2020)

### **University of Michigan**

- SI 543 Programming 1: Java for Android (Fall 2014)
- SI 582 Interaction Design (Winter 2014, Winter 2015)
- Special Topics: Crowdsourcing Seminar (Winter 2015)

#### Other teaching experiences

- Citizen School Teacher, Dever-McCormack Middle School, Dorchester, MA, Jan-May 2012
- Harvard University, CS 179, Guest Lecturer, Designing Across Cultures, April 2011 and April 2012
- National University of Rwanda, Butare, Rwanda, Visiting Lecturer, Computer Science Department, "Software Engineering", 2009
- ETH Zurich & University of Zurich, Teaching Assistant, Executive MBA, Winter 2008
- University of Zurich, Teaching Assistant, Informatics for Business Administration and Economics Students (~800 students), Winter 2006, 2007, and 2008
- National University of Rwanda, Butare, Rwanda, Visiting Lecturer, Computer Science Department, "Introduction to Programming in Java", 2005

## OTHER SCHOLARLY ACTIVITY

### **Invited talks and lectures**

- Annual Meeting of the Cognitive Science Society, Invited speaker at a workshop on Opensource ecosystems for Massive Online Experiments and Citizen Science, July 2023 (scheduled)
- 2. Max Planck Institute for Software Systems, Research Symposium, March 2023
- 3. UW Center for Responsibility in Artificial Intelligence Systems and Experiences, February 2023
- 4. Max Planck Institute for Security & Privacy. *Bias by Design: How Digital Technology Can Fail its Diverse Users*, October 2022.

- 5. University of Zurich, Computer Science Department. *Bias by Design: How Digital Technology Can Fail its Diverse Users*, September 2022.
- 6. Facebook Reality Labs, Responsible Innovation & Ethics Lunch Series, October 2021.
- 7. University of Washington, Paul G. Allen School of Computer Science and Engineering, guest lecture in CSE 599 on Social Computing, invited by Prof. Amy Zhang, March 2021.
- 8. UCSD, Cognitive Science Department, Social Computing class, invited by Prof. Steven Dow. January 2021.
- 9. University of Florida, Department of Linguistics, Course: Online Data Collection Methods in Linguistics. *Online Experiments with Volunteers: Lessons Learned from Eight Years of LabintheWild.* Invited by Prof. Edith Kaan. November 2020.
- 10. University of Lisbon, Data Science master's program, *Online Experiments with Volunteers:* Lessons Learned from Eight Years of LabintheWild. Invited by Prof. Tiago Guerreiro. November 2020.
- 11. FAT MM workshop in conjunction with ACM Multimedia 2020, Keynote speaker. *Bias and unintended consequences of WEIRD technology*. October 2020.
- 12. University of Washington, Department of Psychology, *Online Experiments With Volunteers:* Lessons Learned from Six Years of LabintheWild, September 2018
- 13. Adobe, San Jose, Designing for People Around the World, September 2018
- 14. Annual Convention of the American Psychological Association (APA), San Francisco, CA, *Conducting Large-Scale Experiments on LabintheWild*, August 2018
- 15. Annual meeting of the Cognitive Science Society, Workshop on online experimentation, July 2018
- 16. Carnegie Mellon University, School of Computer Science, *Online Experiments With Volunteers: Lessons Learned from Six Years of LabintheWild*, May 2018.
- 17. Google, San Francisco, CA, Designing Less WEIRD User Interfaces, June 2017
- 18. University of Washington, CSE 190: Direct Admission Seminar, *LabintheWild*, November 2016
- 19. University of California Los Angeles, School of Management, *Visual Preferences Around the World*, September 2016
- 20. University of Washington, CSE 510: Advanced Topics in HCI, *Extending HCI Principles to Other Cultures and Countries*, February 2016
- 21. University of Washington, DUB seminar, *Using Large-Scale Online Experiments to Design less WEIRD User Interfaces*, November 2015
- 22. University of Washington, e-Science Institute, *LabintheWild: Conducting Uncompensated Online Experiments at Large-Scale*, November 2015
- 23. University of Washington, Computer Science & Engineering, *Using Large-Scale Online Experiments to Design User Interfaces for People Around the World*, April 2015
- 24. Boston University, Computer Science Department, *Using Large-Scale Online Experiments to Design User Interfaces for People Around the World*, April 2015
- 25. University of California San Diego, Cognitive Science Department, *Using Large-Scale Online Experiments to Design User Interfaces for People Around the World*, March 2015

- 26. University of Colorado Boulder, Computer Science Department, *Using Large-Scale Online Experiments to Design User Interfaces for People Around the World*, February 2015
- 27. New York University, Stern School of Business, *Using Large-Scale Online Experiments to Design User Interfaces for People Around the World*, February 2015
- 28. Carnegie Mellon University, School of Computer Science, *LabintheWild: Large-Scale, Uncompensated Online Experiments*, October 2014
- 29. University of Toronto, Knowledge Media Design Institute (KMDI), *LabintheWild: Conducting Large-Scale, Uncompensated Online Experiments Around the World*, October 2014
- 30. German Institute of Artificial Intelligence (DFKI), Saarbrücken, Germany, *LabintheWild:* Conducting Large-Scale, Uncompensated Online Experiments Around the World, September 2014
- 31. Stanford University, Management Science and Engineering, *Making Science Less Weird*, May 2014
- 32. SXSWedu'14, Austin, TX, Making Science Less Weird, March 2014
- 33. University of Toronto, School of Information, A Design Science Approach to Interfaces that Automatically Adapt to Culture, December 2013
- 34. University of Michigan, School of Information, *Adapting User Interfaces to Cultural Differences in Perception and Preferences*, March 2013
- 35. University of Rochester, Department of Computer Science, *Adapting User Interfaces to Cultural Differences in Perception and Preferences*, February 2013
- 36. University of Maryland Baltimore County, Department of Information Systems, *Adapting User Interfaces to Cultural Differences in Perception and Preferences*, February 2013
- 37. HEC Paris, School of Management, *Adapting User Interfaces to Cultural Differences in Perception and Preferences*, February 2013
- 38. Aarhus University, School Business and Social Sciences, *Adapting User Interfaces to Cultural Differences in Perception and Preferences*, February 2013
- 39. University of Edinburgh, School of Informatics, *Adapting User Interfaces to Cultural Differences in Perception and Preferences*, January 2013
- 40. University of Kent, School of Engineering and Digital Arts, *Adapting User Interfaces to Cultural Differences in Perception and Preferences*, January 2013
- 41. University of Bern, Institute of Information Systems, *Adapting User Interfaces to Cultural Differences in Perception and Preferences*, January 2013
- 42. University of Saskatchewan, Computer Science Department, *Does One Size Fit All? How Cultural Background Influences How We Perceive and Interact With User Interfaces*, November 2012
- 43. Harvard School of Engineering and Applied Sciences, CS 179: Design of Usable Interactive Systems, *Designing Across Cultures*, April 2012
- 44. Adobe Research, San Francisco, CA, *Does One Size Fit All? Adapting User Interfaces to Cultural Abilities*, August 2011
- 45. Harvard School of Engineering and Applied Sciences, CS 179: Design of Usable Interactive Systems, *Designing Across Cultures*, April 2011

- 46. IBM Watson Research Center, Hawthorne, NY, *Tell me where you've lived, and I'll tell you what you like*, August 2010
- 47. IBM Watson Research Center, Cambridge, MA, *Culturally Adaptive User Interfaces*, August 2010
- 48. General Motors Research, Israel, *Incorporating Cultural Adaptivity into Navigation Systems*, July 2010
- 49. Credit Suisse Bank, Switzerland, Culturally Adaptive User Interfaces, August 2009
- 50. Informatica '08, "Culture and IT", Basel, Switzerland, June 2008

### **Professional society memberships**

Association for Computing Machinery (ACM) and ACM SIGCHI

### **Chairing Activities**

- Papers Co-Chair (with Naomi Yamashita, Hao-Chuan Wang, and Hideaki Kuzuoku) of the ACM Conference on Computer Support Cooperative Work and Social Media (CSCW), 2022 (includes two submission cycles in July 2021 and January 2022, as well as quarterly revision cycles over the course of two years)
- Program Co-chair (with Michael Bernstein) of the ACM Conference on User Interface Software and Technology (UIST) 2019
- Co-chair (with Ece Kamar) of the AAAI Conference on Human Computation and Crowdsourcing (HCOMP) Works-in-Progress & Demonstration Track, 2017
- Co-chair (with Gary Hsieh) of the University of Washington DUB 2016 Annual Retreat (hosting more than 150 local researchers and practitioners for a full-day program)

#### **Associate Editor**

• International Journal of Human-Computer Studies (IJHCS), 2015-2017

#### **Program Committee Membership** (approximate number of refereed articles in brackets)

- Computer Supported Cooperative Work (CSCW), 2019-2020 (15)
- Learning at Scale, 2018 (10)
- Human Factors in Computing Systems (CHI), 2018 (22)
- Human Factors in Computing Systems (CHI), 2017 (24)
- Computer-Supported Cooperative Work (CSCW), 2017 (14)
- AAAI Conference on Human Computation and Crowdsourcing (HCOMP), 2016 (8)
- International Workshop on Diversity-Aware Artificial Intelligence, 2016 (6)
- Human Factors in Computing Systems (CHI), 2015 (21)
- Human Factors in Computing Systems (CHI) Workshops, 2015 (10)
- Human Factors in Computing Systems (CHI), 2014 (25)
- Human Factors in Computing Systems (CHI), 2013 (22)

- User Modeling, Adaptation, and Personalization (UMAP), 2015 (8)
- User Modeling, Adaptation, and Personalization (UMAP) late-breaking, 2015 (5)
- User Modeling, Adaptation, and Personalization (UMAP) posters and demos, 2015 (10)
- Workshop on Personalised Multilingual Web Access at World Wide Web (WWW), 2015 (3)
- Workshop on Personalised Multilingual Web Access at World Wide Web (WWW), 2014 (4)
- User Modeling, Adaptation, and Personalization (UMAP), 2014 (8)
- Designing Interactive Systems (DIS), 2014 (14)
- ACM Symposium on Applied Computing (SAC), 2014 (3)
- Workshop on Culturally-Aware Tutoring Systems at Artificial Intelligence in Education (AIED), 2013 (6)
- Intelligent User Interfaces (IUI), 2011 (15)
- Doctoral Consortium at User Modeling, Adaptation, and Personalization (UMAP, 2010 (6)
- User Modeling, Adaptation, and Personalization (UMAP), 2010 (8)
- Workshop on Culturally-Aware Tutoring Systems at Intelligent Tutoring Systems, 2010 (4)
- Workshop on Culturally-Aware Tutoring Systems at Artificial Intelligence in Education (AIED), 2009 (5)

## Reviewing

#### Conference Reviewing

- ACM Computer-Supported Collaborative Work (CSCW), 2011-2019
- ACM Human Factors in Computing Systems (CHI), 2011, 2012, 2016, 2019, 2020, 2021, 2022
- ACM User Interface Software and Technology (UIST), 2011, 2013, 2016, 2017, 2018
- IEEE Infovis, 2018
- UbiComp, 2016
- ACM Creativity and Cognition, 2015
- Intelligent User Interfaces (IUI), 2011, 2012, 2013
- Engineering Interactive Computing Systems (EICS), 2013
- Human-Computer Interaction with Mobile Devices and Services (Mobile HCI), 2011
- User Modeling, Adaptation, and Personalization (UMAP), 2010
- World Wide Web Conference (WWW), 2009
- International Semantic Web Conference (ISWC), 2008, 2009
- European Semantic Web Conference (ESWC), 2007, 2008, 2009

### Journal Reviewing

- Transactions in Human-Computer Interaction (ToCHI), 2014, 2015, 2021
- International Journal of Human-Computer Studies (IJHCS), 2007, 2011, 2012, 2013, 2014, 2015, 2021
- Interacting with Computers, 2014, 2015
- Information Visualization, 2013
- MIS Quarterly, 2011
- International Journal of Social Robotics, 2010
- User Modeling and User-Adapted Interaction (UMUAI), 2009

# **Grant Reviewing**

- University of Washington, Royalty Research Fund, 2016
- National Science Foundation Panelist, 2016, 2017, 2019

### MENTORING

#### **Current Doctoral Students**

- Nino Migineishvili, UW CSE (incoming student, co-advised with René Just)
- Spencer Williams, UW HCDE (co-advised with Gary Hsieh)
- Yuren "Rock" Pang, UW CSE
- Katherine Juarez, UW CSE
- Sebastin Santy, UW CSE

## Chaired Ph.D. theses

- Tal August, Language as Design: Adapting Language to Different Online Audiences, November 2022 (co-chair with Noah Smith)
- Qisheng Li, Conducting Volunteer-based Online Studies with People with Cognitive Disabilities, August 2022 (chair)
- Judith Yaaqoubi, UW HCDE, Practitioners' Views on Cultural Adaptation of Web-based Products, December 2021 (co-chair with Sean Munson)

# **Doctoral Supervisory Committees**

- Suchin Gururangan, UW CSE, Winter 2023
- Jim Chen, UW CSE, Fall 2022
- Liu Yang, UW CSE, Summer 2022
- Alex Kale, UW iSchool, Summer 2022
- Laton Vermette, Simon Fraser University, Spring 2022
- Elizabeth Clark, UW CSE, Fall 2021
- Younghon Kim, UW CSE, Summer 2021
- Abdullah Ali, UW iSchool, Fall 2020

- Lucas Colusso, UW HCDE, Fall 2020
- Ather Sharif, UW CSE, Co-chair Qualification exam committee, Fall 2020
- Yea-Seul Kim, UW iSchool, Summer 2020
- Rajalakshmi Nandakumar, UW CSE, Summer 2020
- Zilin Ma, Harvard Computer Science, Qualification exam committee, Summer 2020
- Kyle Thayer, Spring 2020
- Aditya Vashistha, UW CSE, Fall 2019
- Eunice Jun, UW CSE, Chair Qualification exam committee, Spring 2019
- Danielle Bragg, UW CSE, Summer 2018
- Camille Cobb, UW CSE, Summer 2018
- Trevor Perrier, UW CSE, Winter 2017
- Nigini Abilio Oliveira, Universidade Federal de Campina Grande in Brazil, 2017
- Zuoming Shi, UW CSE, Qualification exam committee, 2017
- Conrad Nied, UW CSE, Qualification exam committee, 2017
- Catherine Baker, UW CSE, Fall 2017
- Nan Li, EPFL Switzerland, 2015

# **Undergraduate and Master Student Research Supervision**

- Yadi Wang, UW CSE, 2021 present
- Aniqua Tabassum, Seattle University, 2021 present
- Elizabeth Castillo, UW Bothell, REU, summer 2021 present
- Anita Silva, UW CSE, 2020-2022
- Jackson Stokes, UW CSE, 2020-2022
- Kimberly Do, REU, summer 2021
- Maria Tracy, UW CSE, 2020-2022
- Josephine Lee, UW CSE, 2020 2021
- Christina Zhang, UW CSE, 2020 2021
- Lior Levy, UW CSE, 2019 2021
- Blue Joe, UW CSE, 2016 2018
- Dean Barlan, UW CSE, 2016 2018
- Humad Shah, UW CSE, 2015 2016
- Yan Chen, Harvard University, 2012
- Jenny Liu, Harvard University, 2012 2013
- Yuechen Zhao, Harvard University, 2012 –2013
- Nancy Chen, Harvard University, 2011 –2012
- Minh Khoa Nguyen, University of Zurich, 2011 2013
- Raphael Ochsenbein, University of Zurich, 2011
- Patrick Minder, University of Zurich, 2009 2010
- Anthony Lymer, 2007 and 2009
- David Eberle, 2009
- Basil Wirz, 2008
- Christian Kündig, 2008
- Matthias Gally, 2008
- Matthias Spinner, 2008
- Andreas Bossard, University of Zurich, 2008
- Roman Zweigel, 2007

### **Postdoc and Research Scientist Supervision**

- Nigini Abilio Oliveira, postdoctoral fellow / research scientist, May 2017 today
- Manuel Nordhoff, visiting research scientist, 2017 2019
- Lia Bozarth, visiting researcher from Google, 2015-2016
- Trevor Croxson, research scientist, 2014 2017

### **SERVICE**

### College and University-wide service

- University-wide Task Force on "Technology and Society", one of seven faculty (2021-2022)
- Mentor for the College's STARS program, supporting students from low-income, firstgeneration, and underserved backgrounds (2017-2019)
- University of Washington DUB Doctoral Consortium Mentor (2017)

# Departmental service

University of Washington, Paul G. Allen School of Computer Science & Engineering

- Makerere Exchange Program (September 2020-September 2022)
- CSE Executive Committee (2 years, September 2019-September 2021)
- CSE Faculty Recruiting Chair (September 2020-September 2021)
  - Oversaw selection and interview process (16 faculty candidates)
  - o Iteratively refined evaluation rubrics for diversity statements
  - o Introduced communication with PhD students throughout the process
- CSE Faculty Recruitment Co-chair (September 2019-September 2020)
  - o Oversaw selection and interview process (27 faculty candidates)
  - o Switched entire process to remote interviewing due to the pandemic
  - Refined process for diversity statements and evaluation rubrics
  - o Introduced process for evaluating diversity statements with staff members
- CSE Diversity Committee (January 2017-2019)
- BS/MS Committee (September 2018-September 2019)
- CSE Graduate Admissions Committee (2017-2018)
- MHCI+D Executive Committee (2016-2018)

#### University of Michigan, School of Information

- Doctoral Committee (2014-2015)
- Faculty Search Committee (2014-2015)
- Master's Program Committee (2013-2014)
- Faculty Search Committee (2013-2014)