

Eva Siegenthaler PhD

Curriculum Vitae

University

2012	Post-doctoral research fellowship awarded by the Swiss National Science Foundation (SNSF) at the Laboratory of Visual Neuroscience, Barrow Neurological Institute, (Phoenix, AZ) and at the MIT2 Laboratory, University of Central Florida (Orlando, FL). Project: Measuring Mental Workload with Microsaccades.
2011	PhD in Psychology (summa cum laude) Title of the dissertation: "How do Electronic Reading Devices influence Reading Behavior? An Analysis of Legibility and Usability.
2009 - 2011	Doctoral study period in Media- and Cognitive Psychology (supervised by Prof. Dr. W. Perrig), University of Bern
2009	M.Sc. in Psychology (summa cum laude)
2007 - 2008	Master Thesis: „Verbale Prozesse bei der Speicherung von Visuellen Stimuli“ (division for Media Psychology, General Psychology & Quantitative Methods, supervised by Prof. Dr. R. Groner)
2005 - 2009	Main study period (Master): Cognitive & Media Psychology, Social Psychology and Industrial Psychology, University of Bern.
2003 - 2005	Basic study period (Bachelor): Psychology, Communications- and Media Science, University of Bern

Further Education

2011	Multilevel- and Panel-Analysis
2011	Near-infrared spectroscopy method (NIRS)
2010	Podcast Production
2008	CAS Teledozent/-in

Experience

Since 2012	SNSF post-doc research fellow at the Laboratory of Visual Neuroscience, Barrow Neurological Institute (Dr. Susana Martinez-Conde) and at the MIT2 Lab, University of Central Florida (Dr. Peter Hancock).
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2008 - 2012	<p>Research associate at IFeL (Institute for Research in Open-, Distance- and eLearning, Usability Lab), Swiss Distance University of Applied Sciences, Brig.</p> <p>Responsibilities: head of the usability lab, usability testing, usability analysis, usability research, developing quantitative and qualitative usability methods, composing publications and presentations, project acquisition, teachings, supervising bachelor and master thesis</p> <p>Projects: Measuring Mental Workload with Microsaccades E-reading Tablet Didactics Interactive e-Books Spatial Knowledge Mobile Usability Eye Tracking and Usability Commercial usability tests</p>
Since 2008	<p>Editorial Consultant of the Journal of Eye Movement Research (www.jemr.org)</p>
2008 – 2009	<p>Assistant marketing research at Swissmilk (SMP), Bern</p> <p>Responsibilities: qualitative product testing, qualitative and quantitative analysis</p>
Mar - Nov.2008	<p>Research Assistant at the Distance Learning University Switzerland</p> <p>Responsibilities: usability testing, usability analysis, editing and correspondence Journal of Eye Movement Research</p>
Jan.-Dec. 2008	<p>Research Assistant, University of Bern, division for General Psychology, Media Psychology & Quantitative Methods</p> <p>Responsibilities: data collection and analysis (focused on virtual reality, immersion and presence combined with eye tracking)</p>
2006-2007	<p>Internship in advertising research, Plan.Net media Spezialagentur für interaktive Kommunikation GmbH & Co. KG (Serviceplan Agenturgruppe für innovative Kommunikation, Munich)</p> <p>Responsibilities: advertising research, target group analysis, market research, research in impact of advertisement</p>

Teachings

2012	Tablet Didactics, Swiss Distance University of Applied Sciences
2011	Tablet Didactics webinar, Swiss Distance University of Applied Sciences

Publications

- 2013 Siegenthaler, E., Costela, F., McCamy, M., Di Stasi, L., Otero-Millan, J., Sonderegger, A., Groner, R., Macknik, S., & Martinez-Conde, S. (2013). Task Difficulty in Mental Arithmetic Affects Microsaccadic Rates and Magnitudes. *European Journal of Neuroscience*, submitted for publication.
- 2012 Siegenthaler E., Bochud Y., Bergamin P. & Wurtz P. (2012). Reading on LCD vs e-Ink displays: effects on fatigue and visual strain. *Ophthalmic Physiol Opt*, 32, 367–374. doi: 10.1111/j.1475-1313.2012.00928.x
- 2012 Siegenthaler, E., Bochud, Y., Wurtz, P., Schmid, L., & Bergamin, P. (2012). The Effects of Touch Screen Technology on the Usability of E-Reading Devices. *Journal of Usability Studies*, 7(3), 94–104.
- 2012 Siegenthaler, E., Wyss, M., Schmid, L. & Wurtz, P. (2012). LCD vs. E-ink: An analysis of the reading behavior. *Journal of Eye Movement Research* 5(3), 1-7.
- 2012 Bergamin, P., Werlen, E., Siegenthaler, E., & Ziska, S. (2012). The relationship between flexible and self-regulated learning in open and distance universities. *The International Review of Research in Open and Distance Learning*, 13(2), 59-80.
- 2011 Siegenthaler, E., Wurtz, P., Bergamin P. & Groner, R. (2011). Comparing reading processes on e-ink displays and print. *Displays*, 32 (5), 268-273. <http://dx.doi.org/10.1016/j.displa.2011.05.005>
- 2010 Siegenthaler, E., Wurtz, P., & Groner, R. (2010). Improving the Usability of E-Book Readers. *Journal of Usability Studies*, 6(1), 25-38.
- 2010 Wissmath, B., Stricker, D., Weibel, D., Siegenthaler, E., & Mast, F.W. (2010). The illusion of being located in dynamic virtual environments. Can eye movement parameters predict spatial presence? *Journal of Eye Movement Research*, 3(5):2, 1-8.
- 2010 Siegenthaler, E. & Groner, R. (2010). Electronic Reading Devices in Distance Learning. Strategies and business models for Lifelong Learning: Proceedings of the EADTU Annual Conference 2010, 27-29 September 2010 (pp. 378-386). Retrieved from: <http://www.eadtu.nl/conference-2010/files/Proceedings%20EADTU%20Zermatt%202010.pdf>
- 2010 Siegenthaler, E. & Groner, R. (2010). Teaching with electronic reading devices. Proceedings of the SITE Conference in San Diego, March 2010.

- 2009 Groner, R., & Siegenthaler, E. (2009). Improving the usability of eLearning tools: The IFeL Multifunctional Analysis and its application in distance teaching. Proceedings of the ICDE/EADTU Conference in Maastricht, June 2009. http://www.ou.nl/Docs/Campagnes/ICDE2009/Papers/Final_Paper_100Groner.pdf
- 2009 Siegenthaler, E. & Groner, R. (2009). Multifunctional usability analysis and its application to the comparison of eBooks with conventional books. http://www.ecem2009.org/Completed_abstract_book.pdf, p.70
- 2008 Joller, J., Siegenthaler, E. & Stettler, E. (2008). Transportation Theorie vs. Wirklichkeitstransfertheorie. In Steinmann, M. F. & Groner R. (Eds.) Exkursionen in Sophies zweiter Welt. Neue Beiträge zum Thema des Wirklichkeitstransfers aus psychologischer und medienwissenschaftlicher Sicht. Bern, Stuttgart, Wien: Haupt

Conferences

- 09/2012 Bielefeld/Germany
The Relationship Between Eye-Tracking-Data and User Ratings in Usability Testing. Oral presentation at the 48. Kongress der Deutschen Gesellschaft für Psychologie.
- 08/2011 Marseille/France
How display technology affects reading behaviour: A comparison of electronic paper and LCD screens. Poster presentation at the 16th European Conference on Eye Movements ECEM. Marseille, France, 21-26. 08. 2011.
- 10/2010 Basel/Switzerland
Presentation at the Trend-Cafe "E-Reading beim Lernen: Leslust- oder Frust?" at Swiss Forum for Educational Media (SFEM), 2010.
- 09/2010 Zermatt/Switzerland
Oral Presentation "Electronic Reading Devices in Distance Learning" at EADTU Networking Conference 2010.
- 04/2010 Berlin/Germany
Oral presentation "E-Reading-Usability: Leselust oder Lesefrust?" at Bitkom Akademie "Der letzte Akt des gedruckten Wortes? Chancen von „E-Buch“ und „E-Zeitung“.

- 03/2010 San Diego / USA
Oral presentation "Teaching with electronic reading devices" and poster presentation "Improving the usability of eLearning-Tools - a multifunctional approach" at 21th SITE conference (Society for Information Technology & Teacher education).
- 08/2009 Southampton/England
Chair and oral presentation at Symposium "New ways of usability research based on Eye Tracking"; chair at session "Application 1" at 15th European Conference on Eye Movement Research ECEM 09.
- 05/2009 Maastricht/Netherlands
Oral presentation "Improving the usability of eLearning tools: The IFeL Multifunctional Analysis and its application in distance teaching" at 23rd ICDE/EADTU World Conference, hosted by the Open Universiteit Nederland. Theme: "Flexible Education for All: Open - Global - Innovative"
- 02/2008 Bern/Switzerland
„When Media Environments become real" University of Bern, Media Psychology.
Poster presentation: „Measuring Immersion into an Action Movie“

Reviews

Peer reviews for Journal of Eye Movement Research
Peer reviews for Ophthalmic and Physiological Optics

Professional Society Memberships

Member of the Swiss Usability Professionals' Association (Swiss UPA)

Member of the European Group of Scientists active in Eye Movement Research