

CURRICULUM VITAE

Sarah Blum
Oldenburg

sarah.blum@uni-oldenburg.de



EDUCATION

- since 04/2017 **PhD Candidate** Neuropsychology Lab, Carl von Ossietzky University of Oldenburg, Prof. Debener. Main research focus: advancing signal processing methods for EEG-based Brain-Computer Interfaces.
- 10/2014-10/2016 **M.Sc. Neurocognitive Psychology** Carl von Ossietzky University of Oldenburg
Thesis: Closing the Brain-Computer Interface Loop on Android: A Signal Processing Application for Single Trial Classification of Selective Auditory Attention ERPs. Overall Grade: 1.19
- 10/2011-10/2014 **B.A. Computer Science and Philosophy** Carl von Ossietzky University of Oldenburg
Thesis: An Investigation of the Turing Machine and Turing Computability („Eine Untersuchung der Turingmaschine und der Turingberechenbarkeit“). Overall Grade: 1.74
- 04/2007-04/2010 **Training for Nurses Responsible for General Care** Karl-Jaspers-Klinik Bad Zwischenahn
- 2006 General Qualification for University Entrance, Neues Gymnasium Oldenburg

WORK EXPERIENCE

- since 09/2017 **Software Developer** Development of hearing aid signal processing algorithms and frameworks. Hörtech AG, Oldenburg
- 10/2016-03/2017 **Research assistant** Neuropsychology Lab, Carl von Ossietzky University of Oldenburg
- 09/2016-12/2016 **Software Developer** Development of mobile signal processing frameworks for EEG measurements. Fraunhofer IDMT, Oldenburg
- 04/2015-05/2017 **Research Assistant for App Development** Development of Arduino Code for integrating sensor data into mobile data measurement setups. Carl von Ossietzky University, Oldenburg
- 07/2015-10/2015 **Research Assistant** Data Analysis. OFFIS, Oldenburg
- 05/2015-06/2015 **Internship Multimodal Sensory Processing** Development and implementation of an experiment in the anechoic chamber. OFFIS, Oldenburg
- 2012-2014 **Tutor in Computer Science** Teaching of students and development of programming workshops for pupils. Carl von Ossietzky University, Oldenburg
- 2010-2012 **Nurse in a Care Home for Elderly** FaSeniHa, Oldenburg

PUBLICATIONS

- 09/2018 **Blum S, Bleichner, MG, Debener S (2018, submitted). Riemannian Artifact Subspace Reconstruction for EEG Artifact Correction**, Frontiers in Human Neuroscience.
- 07/2018 **Blum S, Debener S (2018). EEG Artifact Attenuation with Artifact Subspace Reconstruction for Android**, Scientific Poster at the 40th IEEE Engineering in Medicine and Biology Conference, Hawaii, USA. github.com

06/2018	Blum S , Bleichner MG and Debener S (2018). Evaluation of Riemannian Artifact Subspace Reconstruction for the correction of EEG artifacts . Front. Hum. Neurosci. Conference Abstract: 2nd International Neuroergonomics Conference. doi: 10.3389/conf.fnhum.2018.227.00134 frontiers.org
07/2018	Blum S , Bleichner M, Debener S (2018). Evaluation of Riemannian Artifact Subspace Reconstruction for the Correction of EEG Artifacts , Scientific Poster at the Neuroergonomics Conference, Philadelphia, USA. github.com
07/2017	Blum S , Debener S, Emkes R, Volkening N, Fudickar S, Bleichner M (2017). Brain-Computer Interfaces on Android , Scientific Poster at the Neuroadaptive Technology Conference, Berlin. github.com
11/2017	Blum S , Debener S, Emkes R, Volkening N, Fudickar S, and Bleichner M (2017). EEG Recording and Online Signal Processing on Android: A Multiapp Framework for Brain-Computer Interfaces on Smartphone , BioMed Research International, vol. 2017, Article ID 3072870, 12 pages, doi:10.1155/2017/3072870 hindawi.com
06/2017	Löcken A, Blum S , Stratmann T, Grünefeld U, Heuten W, Boll S and van de Par S (2017). Effects of Location and Fade-In Time of (Audio-)Visual Cues on Response Times and Success-Rates in a Dual-Task Experiment . Conference Paper at the ACM SAP 2017. dl.acm.org

INVITED TALKS

10/2018	User Interface Software and Technology Symposium Summer School Correction of artifacts in EEG signals for BCIs. Berlin. UIST Summer School
09/2018	Second International Workshop on LSL Hanse-Wissenschaftskolleg, Delmenhorst. hwk.de/LSL
07/2018	MoBI Conference Berlin. tu-berlin.de
12/2016	First International Workshop on LSL Hanse-Wissenschaftskolleg, Delmenhorst. hwk.de/LSL

AWARDS

07/2018	MoBI Award, Berlin (3rd winner). MoBI Winners 2018
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EXTRACURRICULAR ACTIVITIES

2018	Member in the doctoral examination board (Promotionsausschuss), Faculty VI Carl von Ossietzky University, Oldenburg
2018	Member in the examination committee (Prüfungsausschuss), Faculty VI Carl von Ossietzky University, Oldenburg
2018	Organisation of Future Day for Boys and Girls Department of Psychology, Carl von Ossietzky, Oldenburg
2014-2015	Equal Opportunities Officer Department of Computer Science, Carl von Ossietzky, Oldenburg
2011-2016	Active member in the Student Body and in several committees, Faculty II Carl von Ossietzky University, Oldenburg

PORTFOLIO AND PROFILES

Code and Projects	github.com
Code and Projects	gitlab.com
Career Network	linkedin.com
Team Page Neuropsychology	uol.de