CURRICULUM VITAE

EDUCATION

Oct 2014 - Dec 2018 — *PhD. Candidate* — Graduate School of Systemic Neurosciences, Luedwig-Maximillians Universitaet

Aug 2012 — *M.Sc. Neuroscience* — Graduate Training Centre of Neuroscience, Eberhard Karls Universitaet TÃ¼bingen

May 2010 — *B.Sc. Psychology* — Wittenberg University

RESEARCH EXPERIENCE

Nov 2018 - July 2019 — *Max Planck Institute of Biochemistry* — Prof. Dr. Matthias Mann

Programmed high-throughput automated data collection and data analysis pipelines. I also designed and implemented a job-scheduling web application, implementing lean management methods to decrease data collection waiting times for 40 users and trained and mentored several biology and bioinformatics researchers in Python programming methods and open-source collaboration workflows, as well as gave introductory programming workshops for over 150 researchers.

May 2013 - Nov 2018 — *Ludwig-Maximillians Universitaet* — Prof. Dr. Anton Sirota

Programmed a 3D graphics engine in Python to build virtual reality system for freely moving rats, supervised students in programming, engineering, and cognitive science projects, organized weekly journal clubs, and ordered new equipment, trained rodents to perform behavioral tasks, and performed surgery on said rodents as part of brain research.

Aug 2012 - May 2013 — *Universitaet Tuebingen* — Prof. Dr. Christoph Braun

Wrote a research grant to study the top-down and bottom-up interactions by computational modeling information propagation in early sensory pathways as measured by MEG, designed and administrated an institute wiki, organized a student lecture series, and supervised two studentsâ€™ EEG research projects.

Nov 2011 - July 2012 — *Universitaet Tuebingen* — Prof. Dr. Niels Birbaumer

Programmed in Matlab a time-frequency and evoked potential analysis on three yearsâ€™ worth of MEG data assessing longitudinal changes in stroke patients receiving physiotherapy.

Oct 2012 - Nov 2012 — *Universitaet Tuebingen* — Prof. Dr. Cornelius Schwarz

Trained rats to perform whisking in response to barrel cortex stimulation viachronically-implanted electrodes, mapping stimulation sensitivity to each cortical layer.

Nov 2010 - March 2011 — *Universitaet Tuebingen* — Dr. Michael Barnett Cowan

Programmed an online EMG classifier in Matlab and Simulink to accurately detect finger movements within milliseconds for EEG coherence brain-computer interface training.

Dec. 2009 - Aug. 2010 — *Wittenberg University* — Prof. Dr. Josephine Wilson

Built an NI-DAQ EEG system, programmed online analysis and data acquisition in Matlab and LabView, and confirmed its functionality in three different experiments. As a senior lab assistant, also worked as an aid for rat neurosurgery and noninvasive electrophysiology (skin conductance, EMG, EKG, and EEG) laboratory course sessions, which included planning and giving demonstrations on each method above.

June-Aug 2008 - June 2009

Duke University Prof. Dr. Jennifer Groh

Trained Macaque monkeys to perform visual saccade tasks while mapping receptive fields in superior and inferior colliculus.

Aug 2007 - Dec. 2009

Wittenberg University Prof. Dr. Michael Anes

Conducted three behavioral psychophysics studies on the hemispheric lateralization of face perception. Tasks included programming stimulus sequences in SuperLab, patient recruitment and management, data collection, and conference poster preparation.

Nov 2006 - March 2007

Wittenberg University Prof. Dr. Jay Yoder

Measured dessication rates in the bed bug and isolated fungal growth in three species of cockroach. These studies resulted in a publication in a peer-reviewed journal and a poster presentation at an undergraduate research conference.

May 2, 2019