

# ADINA S. WAGNER

email

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## EDUCATION

M.Sc., Clinical Neuroscience	10/2016-02/2019	Otto-von-Guericke University Magdeburg
	Grade: 1.1	· with honors
		Thesis: <i>Catching the eye - Investigating the functional neuroanatomy of visuospatial attention with fMRI and eyegaze recordings during natural stimulation</i> ". Grade: 1.0
		Advisors: Prof. Michael Hanke & Prof. Claudia Preuschhof
		Minor: Macroeconomics
B.Sc., Psychology	10/2012-09/2016	Technical University Braunschweig
	Grade: 1.2	· ECTS A - Among 10% best
		Thesis: <i>Disentangling Loneliness: A Prospective Study on Differential Effects of Loneliness Measures on Health in Adults in their Second Half of Life</i> . Grade: 1.0
		Minor: Neurobiology
		Elective: Neuropsychology, Forensic Psychology, Counseling Psychology, Rehabilitation Psychology
Abitur	2004-2012	Phoenix Gymnasium Wolfsburg
	Grade: 1.1	
		Special subjects: Maths, English, German

## WORK EXPERIENCE

Institute of Neuroscience and Medicine, INM-7	04/2019-current	Research Associate, Research Center Juelich
		5-year full-time position as a research associate/Doctoral Researcher in Prof. Michael Hanke's Psychoinformatics group, with a focus on research and occasional thesis supervision in BSc and MSc students. Simultaneous work towards a Dr. rer. nat.
		Reference: Prof. Michael Hanke · michael.hanke@gmail.com
Psychoinformatics Lab	10/2017-07/2018	Statistics Tutor, OvGU Magdeburg
		Tutor for statistics for first-year Bachelor Psychology students.
		Self-responsible conception and implementation of 3 hours of weekly statistics tutoring, tailored to the lecture. Initiated, planned and conducted evaluation of own teaching concept with results showing statistically significant, mostly gender-independent improvements in statistics related attitudes and expectations among students.
		Reference: Prof. Michael Hanke · michael.hanke@gmail.com
Staedtisches Klinikum Braunschweig	10/2016-10/2018	Research Associate, Clinic for Neurology
		Development and implementation of a patient study to evaluate validity of the IQCODE as a measure for early detection of Alzheimers Disease.
		Reference: Julia Guenther · j.guenther@klinikum-braunschweig.de
Department for Developmental, Forensic and Personality Psychology	06/2015-08/2017	Research Assistant, TU Braunschweig
		Research-oriented tasks, predominantly statistical evaluation of a forensic rehabilitation program for criminals (R&R; Reasoning & Rehabilitation)
		Reference: Prof. Daniela Hosser · daniela.hosser@tu-bs.de

05/2013–08/2014      Research Assistant, TU Braunschweig

*Department for  
Developmental,  
Forensic and  
Personality  
Psychology*

Tasks in research and teaching, among others conception of childrens' Uni ("Warum kann das Gewissen beißen") of the TU Braunschweig, validation and re-conception of the German version of the depression-anxiety-stress scale (DASS), and tasks in the field of lie detection and emotion recognition.  
Reference: Prof. Daniela Hosser · daniela.hosser@tu-bs.de

#### INTERNSHIPS AND RESEARCH STAYS

10/2018–02/2018      Visiting Student, Dartmouth College

*Department for  
Psychological and  
Brain Sciences*

Four-month voluntary research-stay under supervision of Prof. Yaroslav Halchenko in Prof. Jim Haxbys Lab at Dartmouth College, New Hampshire, USA. Work in the area of brain imaging, machine learning, open science/open software and software development, predominantly in a project deriving models of the neural basis of eyemovement control with searchlight-hyperalignment and Gaussian naive Bayes classification.  
Reference: Prof. Yaroslav Halchenko · Yaroslav.O.Halchenko@dartmouth.edu

02/2017–03/2018      Internship student, OvGU Magdeburg

*Department of  
Neuropsychology*

Four-week voluntary internship under supervision of MSc Christian Kaiser in the area of neuropsychological research on the habenula via behavioral computer-based experiments and structural MRI.  
Reference: MSc Christian Kaiser · christian.kaiser@ovgu.de

04/2016–07/2016      Internship Student, Klinikum Braunschweig

*Clinic for  
Neurology*

Thirteen-week voluntary internship under supervision of MSc Julia Guenther in the area of neuropsychological testing and diagnostics. This internship led to a two year contract as a research associate.  
Reference: Julia Guenther · j.guenther@klinikum-braunschweig.de

09/2014–04/2015      Visiting Student, Cambridge University

*Institute of  
Psychology,  
Subdepartment of  
Animal Behavior*

Six-month voluntary research stay under supervision of Dr. Ljerka Ostojic in Prof. Nicky Clayton's Labs at the University of Cambridge, Institute of Psychology. Research assistance in the area of comparative psychology, especially pseudo-episodic memory and social cognition of Garrulus glandarius (Eurasian Jay) and other corvids.  
Reference: Dr. Ljerka Ostojic · lo245@cam.ac.uk

05/2013–08/2014      Internship Student, TU Braunschweig

*Department for  
Developmental,  
Forensic and  
Personality  
Psychology*

Internship under supervision of Prof. Daniela Hosser in the area of forensic-psychological assessment of victims of sexual assault.  
Reference: Prof. Daniela Hosser · daniela.hosser@tu-bs.de

02/2013–03/2014      Internship Student, TU Braunschweig

*Department for  
Methods and  
Biopsychology*

Research-oriented internship under supervision of BSc Florian Lange in the area of experimental psychology, with a focus on the replication of ego-depletion effects and inference.  
Reference: Dr. Florian Lange · florian.lange@kuleuven.be

## JOURNAL ARTICLES

- 2019** Yarkoni, T. et al. (2019), PyBIDS: Python tools for BIDS datasets. Journal of Open Source Software. DOI: 10.21105/joss.01294
- WAGNER, A. S., Hanke, M. & Halchenko, Y. O (2019). multimatch\_gaze: The MultiMatch algorithm for gaze path comparison in Python. Journal of Open Source Software. DOI: 10.21105/joss.01525
- Mathot, S., WAGNER, A. S. & Hanke, M. (2019). Pupil size, locus coeruleus, emotional intensity, and eye movements during unconstrained movie viewing. Journal of Vision. DOI: 10.1167/19.10.252c
- 2018** Beller, J & WAGNER, A. (2018). Loneliness, Social Isolation, their Synergistic Interaction and Mortality. Health Psychology. DOI: 10.1037/hea0000605
- WAGNER, A, Klag, J., Toennies, E., Sennock, S., Leikeim, L. & Dodel, R. (2018). Neue Kriterien fuer die Diagnose der Demenz mit Lewy-Koerpern. InFo Neurologie & Psychiatrie. DOI: 10.1007/s15005-017-2088-2
- 2017** Lange, F., WAGNER, A., Mueller, A. & Eggert, F.(2017). Subscales of the Barratt Impulsiveness Scale differentially relate to the Big Five Factors of Personality. Scandinavian Journal of Psychology. DOI: 10.1111/sjop.12359
- Beller, J. & WAGNER, A. (2017). Disentangling Loneliness: A Prospective Study on Differential Effects of Loneliness Measures on Health in Adults in their Second Half of Life. Journal of Ageing and Health. DOI: 10.1177/0898264316685843

## BOOKS AND BOOK CHAPTERS

- 2019** Hanke M., Mathôt S., Ort E., Peitek N., Stadler J. & WAGNER, A. S. (2019). A Practical Guide to Functional Magnetic Resonance Imaging with Simultaneous Eye Tracking for Cognitive Neuroimaging Research. In: Pollmann S. (eds) Spatial Learning and Attention Guidance. Neuromethods, vol 151. Humana, New York, NY. DOI: 10.1007/978-1-4939-9311-1\_31
- WAGNER, A. S., ... & Hanke, M. (2019). The DataLad Handbook, Release 0.12 DOI: 10.5281/zenodo.3608612

## POSTER

- 2020** Poldrack, B., Meyer, K., ...& Hanke, M. DataLad: Management and transport logistic for scientific (meta)data. 7th HPB Summit, Athens
- 2019** WAGNER, A. S., Dar, A.H. & Hanke, M. (2019) A Python-based Algorithm for Robust Event Detection for Eye Movements During Natural Viewing. 3rd HBP Supercomputing Workshop, Juelich, Germany, 2019

WAGNER, A. S., Nastase, S. A., Hanke, M. & Halchenko, Y. O. (2019). Turn it sideways: A novel approach for determining the specificity of functional ROIs. OHBM 2019, Rome.

**2017** WAGNER, A. & Beller, J. (2016) Disentangling Loneliness: A Prospective Study on Differential Effects of Loneliness Measures on Health in Adults in their Second Half of Life. Congress of the German Association for Psychology (DGPs), Leipzig, Germany

**2015** WAGNER, A. & Legg, E. (2015). Seeing it their Way: Implicit Mentalizing or Attention Shifting? Neuro-wissen-schaffen, Hamburg, Germany

#### SUBMITTED WORK

Dar, A. H.\*, WAGNER, A. S.\* & Hanke, M. (submitted). REMoDNaV: Robust Eye Movement Detection for Natural Viewing. BioRxiv, <https://doi.org/10.1101/619254> (currently under review at Behavioral Research Methods)

Beller, J.\* & WAGNER, A. S.\* (submitted). Cross-cultural Effects of Loneliness: Individualism/Collectivism Moderates the Effect of Loneliness on Health

#### TEACHING

##### *Workshops*

Data management with DataLad. Workshop for the Institute for Neuroscience and Medicine, Structural and Functional Brain Organization (INM-1). Jan. 21st 2020

Data management and the BIDS data standard. Workshop for the IRTG graduate program of RWTH Aachen, Nov. 26th 2019

Introduction to version control with Git. Jülich Research Centre, Jul. 4th 2019

##### *Lectures*

Scalable data management. 4-month lecture series for INM-7, Juelich Research Centre, Autumn 2019

Inferential Statistics. One semester tutorial series for 1st year undergraduate Psychology students, Otto-von-Guericke Universität Magdeburg, Summer 2018

Descriptive Statistics. One semester tutorial series for 1st year undergraduate Psychology students, Otto-von-Guericke Universität Magdeburg, Winter/Spring 2017/2018

## SOFTWARE, AND SOFTWARE I HAVE CONTRIBUTED TO

*Own open  
software  
projects*

WAGNER, A. & Hanke, M. adswa/multimatch\_gaze: multimatch-gaze-v0.1 (Version v0.1). Zenodo. doi.org/10.5281/zenodo.2658123

WAGNER, A., ... & Hanke, M. The DataLad Handbook

Hanke, M., Dar, A. H. & WAGNER, A (2019). psychoinformatics-de/remodnav: Submission time (Version 1.0). doi.org/10.5281/zenodo.2651042

*Software  
contributions*

Markiewicz, C. J., De La Vega, A., WAGNER, A., Halchenko, Y. O., Poldrack, R. A., & Gorgolewski, K. J. (2019, February 1). poldracklab/fitlins: 0.2.0 (Version 0.2.0). doi.org/10.5281/zenodo.2555453

Yarkoni, T., Markiewicz, C.J., de la Vega, A., Gorgolewski, K.J., Salo, T., Halchenko, Y.O., et al. (2019, February 1). bids-standard/pybids: 0.7.1 (Version 0.7.1). doi.org/10.5281/zenodo.2555449

For all of my contributions to open source software, please visit my Github account.

## AWARDS AND GRANTS

06/2020-06/2021	REPRONIM/INCF TRAINING FELLOWSHIP: Received one of five full year Train-the-Trainer fellowships
07/2019	HUMAN BRAIN PROJECT EDUCATION PROGRAM, Fee waiver based on abstract-based application for the 3rd HBP curriculum workshop series
03/2013-02/2019	GERMAN ACADEMIC FOUNDATION, Scholarship
09/2014-04/2015	ERASMUS PLACEMENT, Funding for research internship abroad
09/2014-04/2015	GERMAN ACADEMIC FOUNDATION, Research-Scholarship (4 months at Dartmouth College, NH, US)
10/2018-01/2019	GERMAN ACADEMIC FOUNDATION, Research-Scholarship (6 months at Cambridge University, UK)
10/2016-10/2018	FORSCHUNGSGEMEINSCHAFT FUER KOGNITIVE NEUROLOGIE E.V., Research Grant

## TECHNICAL SKILLS

I developed a broad collection of software and technical skills in the wake of my association with the Psychoinformatics Lab since late 2017 through extensive use on up to a daily basis and thanks to learning one-on-one from experienced systems administrators, software developers, and data scientists. I extended these skills with on-site and web-based software development, data analysis, and programming courses.

<i>Programming</i>	Experience in Python (2 and 3), bash, LaTeX, R, HTML
<i>Open Source/ Software</i>	Version control with Git (+ teaching), data management with DataLad, collaborative software projects on Github, contributions to large software projects (PyMVPA, fitlins, PyBIDS, DataLad, ...), own Github based software and data-analysis projects.
<i>Data Science</i>	Experience in generic scripting with Python (NumPy, pandas, sklearn, matplotlib, pyplot, seaborn, ...), R (lmer, brms, ez, ..., + teaching experience), SPSS, STATA (econometric modeling)
<i>Neuroscience</i>	Experience in scripting for neuroimaging in Python (pymvpa, sklearn, nibabel, nipy, fmrip, fitlins, pybids, FSL), basic experience with modeling and simulation with NEST and Arbor
<i>Miscellaneous</i>	Experience in usage of Datalad, Datalad-containers, Docker, Singularity, Singularity-Hub, Unix, Debian, zshell, vim, pycharm, reveal.js
<i>Generic Office Skills</i>	MS-Office, LibreOffice, Microsoft Windows, Adobe Photoshop Elements, Gimp, Inkscape

## OTHER INFORMATION

<i>Hackathon</i>	2020 · Turing Way book dash Attendance of the TuringWay book dash in London, UK, 20.-21.02.2020
<i>Academic Advancement</i>	2019 · Neurohackademy Attendance of the 14 day Neurohackademy 2019 in Seattle, WA, USA, 29.07.-09.08.2019
<i>Academic Advancement</i>	2019 · High-performance computing for neuroscience: hands-on introduction to supercomputing, tools, and applications Attendance of 3 day workshop on supercomputing usage, organized by the Human Brain Project Education Programme, 09.07.-11.07.2019
<i>Hackathon</i>	2019 · OHBM 2019 Hackathon Rome Attendance of the Hackathon of the OHBM in Rome, Italy, 06.-08.06.2019
<i>Academic Advancement</i>	2018 · 2nd Bayes Symposium Attendance of 4 day workshop on Bayesian Multilevel Modeling with Paul Buerkner, 30.07.-03.08.2018
<i>Organizing committee</i>	2018 · Brainhack Magdeburg 2018 Co-Organizer of the Brainhack Magdeburg, May 3rd-5th, part of the Brainhack Global 2018
<i>Academic Advancement</i>	2016-2018 · Lebenswissenschaftliches Kolleg Participation in two-year life science college of the german academic foundation in the group "Psycho- und Neurowissenschaften"
<i>Voluntary Teaching in Talent Program</i>	2017 · Jugendbildung in Gesellschaft und Wissenschaft e.V. Preperation and conduction of the course "Wenn die grauen Zellen schlapp machen - Neuropsychologie der Hirnerkrankungen und Hirnschaedigungen" of the JGW-Schueler Akademie Papenburg, 23. July 2017 - 03. August 2017
<i>Expert Activities</i>	2017 · Reviewer for the German Academic Foundation e.V

<i>Academic Advancement</i>	2016 · "Kolloquium Neurologische Forschung" Attendance of the 3 day colloquium from 30.09.-02.10. in the Cologne, group 'neurodegenerative diseases' under supervision of Prof. Frank Jessen
<i>Expert Activities, Charity Committee</i>	2015-2016 · Reviewer and committee member for the national charity project "Helfenden helfen. Fluechtligen helfen."
<i>Academic Advancement</i>	2015 · Neuro-Wissen schaffen Attendance of the 3 day seminar "Neuro-Wissen schaffen", from 10.-12.06.2015 in Hamburg
<i>Academic Advancement, Teaching</i>	2015 · CHOICE One year training to become a certified group coach for vocational orientations for highschool students
<i>Academic Advancement</i>	Since 2014 · online courses on coursera.org and edx.org: · Eindhoven University of Technology: Improving your Statistical Inferences; · Microsoft: Introduction to R programming; · University of Texas: Foundations of Data Analysis Part I; · University of Texas: Foundations of Data Analysis Part II, · Harvard University: Data Analysis for Life Sciences: Statistics and R
<i>Voluntary Work</i>	since 2009 · Lutheranian Church Braunschweig Preperation and supervision of the three-week confirmation travel KFS of the Lutheranian Church in 2009, 2010, 2011, 2015 and since 2016 management of social media webpages
<i>Languages</i>	GERMAN · Mothertongue ENGLISH · Advanced (business fluent) LATIN · Latin Proficiency Certificate ITALIAN · Basic (Level A1.2)

March 8, 2020