ADINA S. WAGNER

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EDUCATION

10/2016-02/2019 Otto-von-Guericke University Magdeburg

M.Sc., Clinical Neuroscience Grade: 1.1 · with honors

Thesis: Catching the eye - Investigating the functional neuroanatomy of visuospatial attention with fMRI and eyegaze recordings during natural stimulation". Grade: 1.0

Advisors: Prof. Michael Hanke & Prof. Claudia Preuschhof

Minor: Macroeconomics

10/2012-09/2016 Technical University Braunschweig

B.Sc., Psychology Grade: 1.2 · ECTS A - Among 10% best

Thesis: Disentangling Loneliness: A Prospective Study on Differential Effects of Loneliness Measures on Health in Adults in their Second Half of Life. Grade: 1.0

Minor: Neurobiology

Elective: Neuropsychology, Forensic Psychology, Counseling Psychology,

Rehabilitation Psychology

2004-2012 Phoenix Gymnasium Wolfsburg

Abitur

Grade: 1.1

Special subjects: Maths, English, German

WORK EXPERIENCE

04/2019-current Research Associate, Research Center Juelich

Institute of Neuroscience and Medicine, INM-7

5-year full-time position as a research associate in Prof. Michael Hanke's Psychoinformatics group, with a focus on research and occasional thesis supervision in BSc and MSc students.

Reference: Prof. Michael Hanke · michael.hanke@gmail.com

10/2017–07/2018 Statistics Tutor, OvGU Magdeburg

Psychoinformatics Lab 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

10/2016–10/2018 Research Associate, Clinic for Neurology

Staedtisches Klinikum Braunschweig 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

06/2015–08/2017 Research Assistant, TU Braunschweig

Department for Developmental, Forensic and Personality Psychology 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 neuropsychlogical 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

For an up-to-date list of my scientific publications, please take a look at my profile on Google Scholar

G. Niso et al. (2022). Open and reproducible neuroimaging: from study inception to publication. osf.io/pu5vb

Wagner, A.S., Waite, L.K., Wierzba, M., Hoffstaedter, F., Waite, A.Q., Poldrack, B., Eickhoff, S.B. & Hanke, M. (2022). FAIRly big: A framework for computationally reproducible processing of large-scale data. Scientific data, 9(1), 1-17 doi.org/10.1101/2021.10.12.464122

Levitis, E., et al. (2021). Centering inclusivity in the design of online conferences—An OHBM-Open Science perspective. GigaScience, 10(8), doi.org/10.1093/gigascience/giabo51

Halchenko, Y.O. et al. (2021). DataLad: distributed system for joint management of code, data, and their relationship (2021), Journal of Open Source Software, doi.org/10.21105/joss.03262

Kan, H.E., Heunis, S., Taylor, S., Wagner, A. S., & White, T. (2021). ESMRMB annual meeting roundtable discussion: "Challenges and solutions in data sharing—an MRI perspective", Magnetic Resonance Materials in Physics, Biology and Medicine, doi.org/10.1007/s10334-021-00942-z

Hanke, M., Pestilli, F., WAGNER, A. S., Markiewicz C. J., Poline, J-B. & Halchenko, Y.O. (2020). In defense of decentralized research data management. NeuroForum, doi.org/10.1515/nf-2020-0037

Dar, A. H.*, Wagner, A. S.* & Hanke, M. (2020). REMoDNaV: Robust Eye Movement Detection for Natural Viewing. Behavior Research Methods, doi.org/10.3758/s13428-020-01428-x

Beller, J.* & Wagner, A.S.* (2020). Cross-cultural Effects of Loneliness: Individualism/Collectivism Moderates the Effect of Loneliness on Health. Journal of Aging and Health. DOI: 10.1177/0898264320943336

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

Beller, J & Wagner, A. (2018). Loneliness, Social Isolation, their Synergistic Interaction and Mortality. Health Psychology. DOI: 10.1037/hea0000605

2020

2019

2018

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 Aging and Health. DOI: 10.1177/0898264316685843

BOOKS AND BOOK CHAPTERS

2020

Wagner, A. S., ... & Hanke, M. (2020). The DataLad Handbook, Release 0.12 DOI: 10.5281/zenodo.3608612

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: 10.1007/7657_2019_31

POSTER

2022

Wagner, A. S., Waite, L.K., Wierzba, M., Hoffstaedter, F., Waite, A.Q., Poldrack, B., Eickhoff, S.B. & Hanke, M. (2022). FAIRly big: A framework for computationally reproducible processing of large-scale data. OHBM 2022 (virtual and in Glasgow) doi.org/10.7490/f1000research.1118958.1

Szczepanik, M., Heunis, S., Mönch, C., Wagner, A.S. & Hanke, M. Distributed Research Data Management in CRC 1451 SFB1451 Retreat 2022

Komeyer, V.A, Raimondo, F., Hoffstaedter, F., Waite, L., Wierzba, W., Wagner, A. S., Hanke, M., Grefkes, C., Eickhoff, S.B. & Patil, K.R. Large-scale predictive modeling of confound-prone motor targets with neuroimaging features from UKB, OHBM 2022 virtual and in Glasgow

2021

Wagner, A. S., Poline, J-B. & Hanke, M. A practical approach to reusable research objects. Virtual INM/IBI Retreat 2021 doi.org/10.7490/f1000research.1118575.1

Markiewicz, C. ... & Yarkoni, T. (2021). BIDS Statistical Models - An implementation-independent representation of general linear models

Küppers, V. ... & Langner, R. (2021). Evaluation of robustness and validity of meta-analytical contrasts, Virtual OHBM meeting 2021

WAGNER, A. S., ...& Hanke, M. The DataLad Handbook: A user-focused and workflow-based addition to standard software documentation. Virtual OHBM meeting 2020

Poldrack, B., Wagner, A. S., ...& Hanke, M. A model implementation of a scalable data storage for scientific computing with DataLad. Virtual OHBM meeting 2020

Poldrack, B., Meyer, K., ...& Hanke, M. DataLad: Management and transport logistic for scientific (meta)data. 7th HPB Summit, Athens

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.

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

REVIEWING

I have reviewed scientific manuscripts for the following journals:

- 1. Scientific Data
- 2. The Journal of Open Source Software
- 3. International Journal of Geriatric Psychiatry

CONSULTANCY

I have been a consultant on the following grants:

"LivingPark: an interactive platform for the continuous evaluation of MRI-based measurements of Parkinson's Disease". PIs: Glatard, T. & Poline, J.-B.. www.michaeljfox.org/grant/mri-biomarkers-data-analysis-and-tool-generation

RFA-DA-19-006; "Workshops on the Use of Adolescent Brain Cognitive Development (ABCD) Data (R25)". PIs: Laird, A. & Kennedy, D. grants.nih.gov/grants/guide/rfa-files/rfa-da-19-006.html

TALKS & TEACHING

2020

DataLad @ Neurohackademy 2022 Seattle

Research Data Management Workshop Aachen. 2-half-day workshop. May 23rd-24th 2022

Research Data Management with DataLad, Uniclinic Hamburg. 2-half-day workshop. April 21st-22nd 2022

Research Data Management Workshop Cologne (II). 2-half-day workshop. April 27-28th 2022

ReproNim Germany Workshop DGPA. Lecturer in two-day virtual workshop for the DPGA. March 23 2022

Research Data Management Workshop Cologne. 2-half-day workshop. January 12-13th 2022

ReproNim Workshop Yale. Lecturer in two-day virtual workshop at Yale. March 25-26 2021 (recording available on Youtube)

Research data management with DataLad. Virtual full day workshop for the Max Planck Institute Berlin (MPIB). November 18th 2020 (recording available on Youtube)

Research data management with DataLad. Virtual workshop for the Juelich Research Centre (Full centre workshop). October 2nd 2020

Data management Basics with DataLad. Virtual workshop for the Max Planck Institute Leipzig (MPI CBS). September 28th 2020

Introduction to DataLad. Traintrack session at the virtual OHBM 2020 BrainHack. June 17th 2020

DataLad for collaborative and reproducible science. 2-day workshop at the Scuola alti studi Lucca, Italy. March 23-24, 2020 - CANCELLED DUE TO COVID-19

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

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

Invited Talks

Oral session chair: Open Code: 6 myths debunked. OHBM Glasgow, June. 21st, 2022.

Oral session chair: Data management tools. OHBM Glasgow, June. 21st, 2022.

Version Control for data and beyond. Talk and panel discussion at the CIMEC Think Open virtual symposium, Mar. 11th, 2022.

Challenges and solutions in data sharing – an MRI perspective. Panel discussant at the ESMRMB, Oct. 9th, 2021.

Research data management. Moderation at the senior scientist meeting of the INM/IBI Retreat 2021, Oct. 5th, 2021.

 $\label{local_code} Code + Data + Software = PDF: How to write a reproducible research article. Talk held at the Netherlands Research Software Engineering Meetup, Sept. 15th, 2021. \\ zenodo.org/record/5508797text$

Challenges in open source in Neuroscience and Biology. Panel discussant at the virtual SciPy 2021, July. 15th 2021.

Decoding Scientific Computing and Software Applications. Panel discussant at the Kick-Off Event for the Helmholtz Societies Research Field Information, Apr. 14th 2021. (website)

Educating and training for a FAIR future. Young Investigator Talk Oral held at the 14th Meeting of the German Neuroscience Society (NWG), Mar. 28th 2021. (recording available on Youtube, Slides on Zenodo)

Reproducibility Management in Neuroscience - Specific issues and solutions. Talk held at the DGPA/DGPs-Symposium "Computational Reproducibility", Nov. 23rd 2020. (recording available on Youtube, Slides on Zenodo)

"DataLad", Open and Reproducible Neuroimaging, DFG Core Facility Workshop, hosted virutally by the University of Oldenburg. November 3rd, 2020

"DataLad - Decentralized Management of Digital Objects for Open Science", Virtual DebConf2o. August 25th, 2020

"Reproducible Research Objects with DataLad", OHBM Open Science Room 2020, Open Workflows theme. June 24th, 2020

"A reproducible paper", INM-7 seminar meeting, Juelich research centre

SOFTWARE, AND SOFTWARE I HAVE CONTRIBUTED TO

Own open software projects

Wagner, A. & Hanke, M. adswa/multimatch_gaze: multimatch-gaze-vo.1 (Version vo.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

Hanke, M., Halchenko, Y. O., Poldrack, B., Meyer, K., Solanky, D.S., Alteva, G., ... Wagner, A.S. (2020, May 22). DataLad (Version 0.13.orc2). doi.org/10.5281/zenodo.3840589

The Turing Way Community, Arnold, B., Bowler, L., Gibson, S., Herterich, P., Higman, R. . . . Whitaker, K.. (2019, March 25). The Turing Way: A Handbook for Reproducible Data Science (Version vo.o.4). Zenodo. doi.org/10.5281/zenodo.3233986.

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 (www.github.com/adswa).

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.

Programming skills

Python (2 and 3), bash, LaTeX, R, HTML

Open Source/ Software

Version control with Git & git-annex (+ teaching), continuous integration (Circle CI, Appveyor, GitHub Actions, Travis) and unit testing (Python, bash), collaborative software development on Github, contributor and maintainer of open source projects. For a complete overview, please visit my Github profile.

Data Science

Experience in generic scripting with Python (NumPy, pandas, sklearn, matplotlib, pyplot, seaborn, ...), R (lmer, brms, ez, ..., + teaching experience), SPSS, STATA (econometric modeling), as well as High-performance and high-throughput computing + job scheduling (HTCondor). Extensive data management skills (+ teaching).

Neuroscience

Experience in scripting for neuroimaging in Python (pymvpa, sklearn, nibabel, nipype, fmriprep, fitlins, pybids, FSL), basic experience with modeling and simulation with NEST and Arbor.

Miscellaneous

Containerization (Docker, Singularity, Singularity-Hub), Unix-experience (Debian-based operating systems, WSL1 \pm 2), proficient with vim and pycharm, solid experience with reveal.js as a presentation framework

Generic Office Skills MS-Office, LibreOffice, Microsoft Windows, Adobe Photoshop Elements, Gimp, Inkscape

OTHER INFORMATION

Academic

2022 · Voice training

Advancement

2-day voice and communication training "Königsdisziplin Stimme"

Hackathon

2021 · Co-chair

of the OHBM 2021 TrainTrack session on code testing and version control

Hackathon

2020 · Turing Way book dash

Attendance of the TuringWay book dash in London, UK, 20.-21.02.2020

Academic Advancement 2019 · Neurohackademy

Attendance of the 14 day Neurohackademy 2019 in Seattle, WA, USA,

29.07.-09.08.2019

Academic Advancement $2019 \cdot \text{High-performance}$ 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

Hackathon

2019 · OHBM 2019 Hackathon Rome

Attendance of the Hackathon of the OHBM in Rome, Italy, o6.-o8.o6.2019

Academic

2018 · 2nd Bayes Symposium

Advancement

Attendance of 4 day workshop on Bayesian Multilevel Modeling with Paul Buerkner, 30.07.-03.08.2018

Organizing

2018 · Brainhack Magdeburg 2018

committee

Co-Organizer of the Brainhack Magdeburg, May 3rd-5th, part of the

Brainhack Global 2018

Academic Advancement 2016-2018 · Lebenswissenschaftliches Kolleg

Participation in two-year life science college of the german academic

foundation in the group "Psycho- und Neurowissenschaften"

Voluntary

2017 · Jugendbildung in Gesellschaft und Wissenschaft e.V.

Teaching in Talent Program 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

Expert Activities

2017 · Reviewer for the German Academic Foundation e.V

Academic Advancement 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

Expert Activities, Charity Committee

2015-2016 · Reviewer and committee member for the national charity project

"Helfenden helfen. Fluechtlingen helfen."

2015 · Neuro-Wissen schaffen Academic Attendence of the 3 day seminar "Neuro-Wissen schaffen", from Advancement

10.-12.06.2015 in Hamburg

Academic Advancement, Teaching

2015 · CHOICE

One year training to become a certified group coach for vocational orientations for highschool students

Academic Advancement 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

Voluntary Work

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

Languages

GERMAN · Mothertongue

ENGLISH · Advanced (business fluent)

LATIN · Latin Proficiency Certificate

ITALIAN · Basic (Level A1.2)

June 4, 2022