

CARINA FORSTER

✉ carinaforster0611@gmail.com 🌐 CarinaFo



Education

Charité Berlin, Germany

2020 - ongoing

PhD candidate

Humboldt Universität zu Berlin, Germany

2016 – 2019

M.Sc. Mind and Brain

Universität Regensburg, Germany

2013 – 2016

B.Sc. Psychology, semester abroad at Wheaton College/Boston/US

Skills

Languages: German (native), English (fluent), Spanish (intermediate)

Programming languages: Python (advanced), R (advanced), Matlab (intermediate), LaTeX (basics)

Work Experience

Google Summer of Code

05-2024 - ongoing

MNE Python open source developer

remote

- implementation of a new cluster statistics API

Max Planck Institute for Human Cognitive and Brain Sciences

2020 - ongoing

PhD candidate

Leipzig

- Supervisor: Prof. Dr. Villringer, neurology department, PhD project: neural correlates of stimulus expectations and their influence on somatosensory perception and confidence in humans, paradigm design, study preparation, data analysis (EEG, behaviour, physiological), computational modelling of behavioural data, logistic mixed modelling

Charité Berlin, Institute for Medical Psychology

2018 - 2019

Master thesis

Berlin

- Supervisor: Prof. Dr. Heim, master thesis project on brain plasticity after sexual childhood trauma in female participants, localization of the genital representation in the somatosensory cortex using 3 Tesla fMRI, study preparation, data collection and analysis of fMRI and clinical questionnaire data

Bernstein Center for Computational Neuroscience, Metamotorlab

2016 - 2019

Student research assistant

Berlin

- Supervisor: Dr. Filevich, investigation of mechanistic accounts of confidence and metacognition in human adults, study preparation, behavioural data analysis and computational modelling

Schoen Klinik München-Schwabing

01 - 04 2016

Clinical intern

Munich

- Supervisor: Dipl. Psych. Tucha, neuropsychology department, tasks: neuropsychological screening of Parkinson's and Dementia patients, development and testing of rehabilitation treatments for cognitive deficits, group and single patient therapy under supervision

Audi Accident Research Unit

2014 - 2015

Student research assistant

Regensburg

- Supervisor: Dr. Weber, main tasks: psychological interviews with traffic accident victims, psychological evaluation of the human causes of the accident, presentation of study cases to the medical and technical support team

Raiffeisenbank Neumarkt

2009 - 2012

Bank apprentice

Neumarkt

- training in finance, investment and credit

Oral Presentations

Cognitive Neuroscience Conference on Body-Brain Waves, Salerno, Italy

2023

Australasian Society for Psychophysiology, Hobart, Tasmania, Australia

2023

Poster Presentations

Cognitive Computational Neuroscience (CCN), Oxford, UK	2023
Scientific advisory board meeting Max Planck Institute, Leipzig, Germany	2023
MindBrainBody Symposium, Berlin, Germany	2023
Annual Society for Neuroscience meeting (SFN), San Diego, US	2022
Association for the Scientific Study of Consciousness (ASSC), Amsterdam, Netherlands	2022
MindBrainBody Symposium, Berlin, Germany	2022

Workshops

MNE Python 1-week Advanced Code Sprint, open source contribution/Github Pull requests, online	2023
MNE Python 1-week Code Sprint, open source contribution/Github Pull requests, online	2022
BAMB: summer school, Advanced Behavioural Modelling, Barcelona, Spain	2022
ASPP: summer school, Advanced Scientific Programming in Python, Bordeaux, France	2021
Neuromatch Academy, 3-week course on computational modelling of neuroscientific data, remote	2020

Teaching

2-day workshop on EEG analysis in MNE Python, University of Liverpool, UK	11/12-07-2024
Berlin Brains: Advanced MNE Programming in Python workshop (Co-Organizer)	
1/2 day workshop on "How to contribute to open source software/Github PRs"	10-2023
Semester course at Charité and BCCN: Applied Programming in Python	
Introductory programming course targeted at female young scientists	03-06 2022

Funding

Einstein Center for Neurosciences, Berlin, PhD stipend for 3 years, 63.000 Euro	2020-2023
Open Call for cross-group PhD research activities at the MPDCC, Berlin Brains workshop, 2000 Euro	2023

Awards

Travel award, ASP 2023, Hobart, Tasmania, Australia	2023
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Publications

- Forster, C.**, Stephani, T., Grund, M., Panagoulas, E., Al, E., Hofmann, S. M., ... Villringer, A. (2024). Pre-stimulus beta power encodes explicit and implicit perceptual biases in distinct cortical areas. *bioRxiv*, 2024-06.
- Studenova, A. A., **Forster, C.**, Engemann, D. A., Hensch, T., Sander, C., Mauche, N., Hegerl, U., Loeffler, M., Villringer, A., N., Nikulin, V. V. (2023). Event-related modulation of alpha rhythm explains the auditory P300 evoked response in EEG. *eLife*, 12:RP88367.
- Kluger, D. S., **Forster, C.**, Abbasi, O., Chalas, N., Villringer, A., Gross, J. (2023). Modulatory dynamics of periodic and aperiodic activity in respiration-brain coupling. *Nature Communications*, 14(1), 4699.
- Ciston, A. B.,* **Forster C.***, Brick, T. R., Kühn, S., Verrel, J., Filevich, E. (2022). Do I look like I'm sure?: Partial metacognitive access to the low-level aspects of one's own facial expressions. *Cognition*, 225, 105155.
*shared first author
- Knop, A. J., Spengler, S., Bogler, C., **Forster, C.**, Brecht, M., Haynes, J. D., Heim, C. (2022). Sensory-tactile functional mapping and use-associated structural variation of the human female genital representation field. *Journal of Neuroscience*, 42(6), 1131-1140.
- Filevich, E., Forlim, C. G., Fehrman, C., **Forster, C.**, Paulus, M., Shing, Y. L., Kühn, S. (2020). I know that I know nothing: Cortical thickness and functional connectivity underlying meta-ignorance ability in pre-schoolers. *Developmental Cognitive Neuroscience*, 41, 100738.