

## Curriculum Vitae

### Personal Data

Title	Dr.
First name	Daniel
Last name	Kristanto
Current position	Post-doctoral researcher (Carl von Ossietzky Young Researchers' Fellowship), end of contract 29/02/2028
Current institution(s)/site(s), country	Carl von Ossietzky Universität Oldenburg (CvO), Department of Psychology, Psychological Methods and Statistics, Germany
Identifiers/ORCID	0000-0003-4729-8839, <a href="https://kristanto.de/">https://kristanto.de/</a>

### Qualifications and Career

Stages	Periods and Details
Degree programme	Mechanical Engineering (M.Sc., research-based), 01/2016 – 10/2017. Thammasat university, Thailand Physics Engineering (B.Eng.), 09/2011 – 06/2015, Universitas Gadjah Mada, Indonesia
Doctorate	09/2018 – 11/2021 (date of certificate: 22 November 2021), Prof. Changsong Zhou, "Understanding Brain-Behavior Relationships via Data-Driven Approach", Physics Department, Hong Kong Baptist University, Hong Kong.
Stages of academic/professional career	Since 03/2025, Post-doctoral researcher, CvO, granted Carl von Ossietzky Young Researchers' Fellowship, Oldenburg, Germany
	04/2022 – 02/2025, Post-doctoral researcher, Psychological Methods and Statistics Lab, CvO, under DFG Priority Programme (SPP2317): "METEOR – MastEring The Oppressive number of forking paths unfolded by noisy and complex neural data", Oldenburg, Germany
	07/2022 – 01/2023, Post-doctoral researcher, granted fellowship by the Hanse-Wissenschaftskolleg (Institute of Advanced Sciences) in collaboration with the School of Medicine and Health Sciences CvO, topic: "Mining the Adolescent Brain to Create Predictive Profiles of Substance Use Vulnerability", Delmenhorst, Germany
	12/2021 – 02/2022, Post-doctoral researcher, Institute of Computational and Theoretical Studies, Hong Kong Baptist University, "Association Between Cognitive Abilities and Brain Subnetworks", Hong Kong

### Supplementary Career Information

- Integration Period (February 2022 – April 2022): Relocation to Germany
- One child born on 06/09/2020

### Activities in the Research System

My research combines advanced modelling with meta-science, with the aim of contributing to more coherence in neuroimaging research. To this end, I actively develop methodological solutions that enhance scientific practice. My work integrates advanced computational methods to investigate brain-phenotype mapping. This commitment extends to meta-research where, as co-lead of the [METEOR](#) project (SPP 2317), I investigate the analytical decisions for functional

Magnetic Resonance Imaging (fMRI) analysis pipelines and develop interactive knowledge spaces to help the community navigate the complex methodological landscapes.

Furthermore, I co-lead Re-SearchTerms, an interactive platform within the UNESCO-endorsed [FORWARD](#) program (FORRT) that strengthens conceptual clarity in open scholarship. This project provides digital infrastructure to harmonize terminology variations across disciplines, contributing to the International Decade of Sciences for Sustainable Development.

I am also committed to ensuring these computational tools are widely accessible by the community ([open data/code](#)). Contributing to the Open Science Interest Group ([OSIG](#)), I develop [guidelines](#) for AI-assisted code writing and serve as [newsletter](#) editor (Issue 10+). I actively disseminate methods through community workshops, such as DPPD 2023, META-REP 2024, PuG 2025, and invited talks, as well as institutional outreach such as university [video](#) and [article](#). Taken together, these efforts aim to bridge the gap between computational modelling and empirical application, establishing a research ecosystem where methodological coherence maximizes the impact of the neuroimaging research.

### **Supervision of Researchers in Early Career Phases**

I actively contribute to mentoring researchers in early career phases. Recently, I contributed significantly to the conceptualization and supervision of a research project involving doctoral candidate Micha Burkhardt. This project investigated the use of Graph Neural Networks to predict the similarity of neuroimaging preprocessing outcomes based on textual descriptions, leading to a peer-reviewed publication (Publication #4 Category A). Additionally, during my three years as a postdoctoral researcher at the University of Oldenburg, I have successfully supervised four Master's theses within the broad area of cognitive neuroscience, focusing on theoretical and methodological questions. Completed theses under my supervision explored topics such as the interplay between brain networks and general intelligence (Oliver Bruton, 2024), heterogeneity in Autism Spectrum Disorder using MRI (Anas Al-Naji, 2024; leading to publication #2 Category B), the relationship between small-world brain networks and intelligence across analytical decisions (Sumbul Jafri, 2023), and neonatal brain development using multiverse analysis (Leonardo Zaggia, 2023). I am currently supervising Cosku Inceler, whose ongoing work on individualized brain atlases is directly linked to the Individual Brain Project and is also targeted for publication. Notably, all students who have completed their theses under my supervision to date have successfully secured PhD positions.

### **Scientific Results**

#### **Category A – Articles in peer-reviewed journals, contributions to peer-reviewed conferences or to anthology volumes, and book publications**

My publications provide the empirical foundation for the Individual Brain Project, demonstrating feasibility in two key pillars: (1) advanced computational modelling of brain-behavior relationships (4, 6-10) and (2) meta-scientific frameworks for creating the knowledge space evaluating analytical stability and reproducibility (1-3, 5).

1. Short, C. A., Hildebrandt, A., Bosse, R., Debener, S., Özyağcılar, M., Paul, K., Wacker, J., & **Kristanto, D.** (2025). Lost in a large EEG multiverse? Comparing sampling approaches for representative pipeline selection. *Journal of Neuroscience Methods*, 424, 110564. <https://doi.org/10.1016/j.jneumeth.2025.110564>
2. **Kristanto, D.**, Craig, A., & Taswell, C. (2025). Structure-Behavior-Action Framework for Coherent Scientific Enterprise. *Brainiacs Journal of Brain Imaging And Computing Sciences*, 6(3). <https://doi.org/10.48085/Q273E0FA6>
3. Jacobsen, N. S. J., **Kristanto, D.**, Welp, S., Inceler, Y. C., & Debener, S. (2025). Preprocessing choices for P3 analyses with mobile EEG: A systematic literature review and

- interactive exploration. *Psychophysiology*, 62(1), e14743.  
<https://doi.org/10.1111/psyp.14743>
4. Burkhardt, M., Hildebrandt, A., Gießing, C., & **Kristanto, D.** (2024). Quantifying Similarity between Graph-Theoretic Resting-State fMRI Data Processing Pipelines for Efficient Multiverse Analysis. *Brainiacs Journal of Brain Imaging And Computing Sciences*, 5(2).  
<https://doi.org/10.48085/XEE8F298E>
  5. **Kristanto, D.**, Burkhardt, M., Thiel, C. M., Debener, S., Gießing, C., & Hildebrandt, A. (2024). The multiverse of data preprocessing and analysis in graph-based fMRI: A systematic literature review of analytical choices fed into a decision support tool for informed analysis. *Neuroscience & Biobehavioral Reviews*, 105846.  
<https://doi.org/10.1016/j.neubiorev.2024.105846>
  6. **Kristanto, D.**, Gießing, C., Marek, M., Zhou, C., Debener, S., Thiel, C., & Hildebrandt, A. (2023, October). An Extended Active Learning Approach to Multiverse Analysis: Predictions of Latent Variables from Graph Theory Measures of the Human Connectome and Their Direct Replication. In 2023 Guardians Workshop (Guardians) (pp. 1-13). IEEE.  
<https://doi.org/10.48085/J962E0F53>
  7. **Kristanto, D.**, Hildebrandt, A., Sommer, W., & Zhou, C. (2023). Cognitive abilities are associated with specific conjunctions of structural and functional neural subnetworks. *NeuroImage*, 279, 120304. <https://doi.org/10.1016/j.neuroimage.2023.120304>
  8. **Kristanto, D.**, Liu, X., Sommer, W., Hildebrandt, A., & Zhou, C. (2022). What do neuroanatomical networks reveal about the ontology of human cognitive abilities? *iScience*, 25, Issue 8. <https://doi.org/10.1016/j.isci.2022.104706>
  9. **Kristanto, D.**, Liu, M., Liu, X., Sommer, W., & Zhou, C. (2020). Predicting Reading Ability from Brain Anatomy and Function: From Areas to Connections. *NeuroImage*, 116966. <https://doi.org/10.1016/j.neuroimage.2023.120304>
  10. **Kristanto, D.**, & Leephakpreeda, T. (2018). Effective dynamic prediction of air conditions within car cabin via bilateral analyses of theoretical models and artificial neural networks. *Journal of Thermal Science and Technology*, 13(2), JTST0020-JTST0020. <https://doi.org/10.1299/jtst.2018jtst0020>.

### Category B – Any other form of published results

My contributions extend to include ongoing works that have been published as preprints (1, 2, 3, 4, 5, 6, 7), publicly accessible interactive tools facilitating knowledge exploration and reproducibility (8, 9, 10), and active contributions to the open science community through science communication (11).

1. **Kristanto, D.** (2026). Beyond Open Repositories: The Need for an Empirically Guided Metascientific Framework in Precision Functional Mapping (D9r4k\_v1). PsyArXiv. [https://osf.io/preprints/psyarxiv/d9r4k\\_v1/](https://osf.io/preprints/psyarxiv/d9r4k_v1/)
2. **Kristanto, D.**, Castro, D. R. D., & Saleh, A. A. (2025). The Research Landscape of Dynamic Functional Connectivity in Parkinson's Disease: Systematic Review and Interactive Tool (p. 2025.12.08.692999). bioRxiv. <https://doi.org/10.64898/2025.12.08.692999>
3. Al-Naji, A., Abdolalizadeh, A., & **Kristanto, D.** (2025). Morphometric Latent Factors in Autism and Their Association with Receptor Profiles and Behavior (p. 2025.12.08.692851). bioRxiv. <https://doi.org/10.64898/2025.12.08.692851>
4. Wang, R., Chang, Z., Liu, X., **Kristanto, D.**, Gartner, E. G. G., Liu, X., Liu, M., Wu, Y., Lui, M., & Zhou, C. (2025). Weak but influential: Nonlinear contributions of structural connectivity to human cognitive abilities and brain functions. arXiv. <https://doi.org/10.48550/arXiv.2505.24125>

5. Leung, A. Y.\*, **Kristanto, D\***, Gießing, C., Ioannidis, J. P., Hildebrandt, A., & Schmalz, X. (2025). The multiverse of developmental dyslexia subtyping: The “Mapping Dyslexia Subtypes” (MAP-Dys) app for analytical decision-making. medRxiv. <https://doi.org/10.1101/2025.07.23.25332032> (\*Shared first authorship).
6. Short, C., Breznau, N., Bruntsch, M., Burkhardt, M., Busch, N., Cesnaite, E., Frank, M., Gießing, C., Krähmer, D., **Kristanto, D.**, Lonsdorf, T. B., Neuendorf, C., Nguyen, H. H. V., Rausch, M., Schmalz, X., Schneck, A., Tabakci, C., & Hildebrandt, A. (2025). Multi-curious: A Multi-Disciplinary Guide to Multiverse Analysis. MetaArXiv. [https://doi.org/10.31222/osf.io/4yzeh\\_v1](https://doi.org/10.31222/osf.io/4yzeh_v1) (community effort).
7. Leung, A. Y., **Kristanto, D.**, & Schmalz, X. (2025). Re-SearchTerms: A Shiny app for exploring terminology variations in psychology and metascience. OSF. [https://doi.org/10.31219/osf.io/gsp7x\\_v2](https://doi.org/10.31219/osf.io/gsp7x_v2)
8. [METEOR-mEEG](#) and [METEOR](#): An interactive knowledge space to explore the variability in fMRI and mobile EEG preprocessing developed based on human-curated literature information in publication #3 and #5 Category A, respectively.
9. [DynaPD](#): An interactive knowledge space to explore the research landscape of dynamic functional connectivity in Parkinson’s Disease, associated with publication #1 Category B.
10. [Dyslexia-Profiling](#): An interactive tool to visualize the analytical decisions to perform dyslexia profiling extracted from literature in publication #4 Category B.
11. Contribution to OSIG ([AI-assisted code writing guidelines](#), [newsletter](#) (10th issue onwards)) and UOL’s [“Being a PostDoc”](#) video.

### Academic Distinctions

1. Hermine Heusler-Edenhuizen Prize for the best paper (2025). An award recognizing outstanding work published by one or more members/affiliates of the School of Medicine, UOL. Related publication: publication #5 Category A.
2. CvO Young Researchers’ Fellowship (2025). A 3-year fellowship supporting my development as an independent researcher, enabling me to establish a distinct research profile and initiate steps towards building junior research group via third-party funding.
3. Treasure Box program for early career researchers under META-REP (SPP 2317) project granted to Anna Yi Leung and Daniel Kristanto. (2023). A Multiverse Analysis of Profiling Methods: Subtyping Dyslexia as a Use Case.
4. Joint Research Fellowship between Hanse Wissenschaftskolleg and Faculty of Medicine, CvO. (2022). A 6-month postdoctoral funding to perform research collaboration involving the Faculty of Medicine and Health Sciences, CvO.
5. Studentship at Hong Kong Baptist University. (2018). A fully-funded PhD programme.
6. Excellent Foreign Student scholarship. (2016). A fully-funded Master’s programme at Thammasat University.