

## Curriculum Vitae

### Personal Data

Title	Dr.
First name	Daniel
Name	Kristanto
Email	<a href="mailto:daniel.kristanto@uni-oldenburg.de">daniel.kristanto@uni-oldenburg.de</a>
Current position	Post-doctoral Researcher (Carl von Ossietzky Young Researcher' Fellowship)
Current institution(s)/site(s), country	Carl von Ossietzky Universität Oldenburg, Germany
Identifiers/ORCID	0000-0003-4729-8839 <a href="https://kristantodan12.github.io/">https://kristantodan12.github.io/</a>
Children	One, born on 06 September 2020

### Qualifications and Career

Stages	Periods and Details
Degree Programme	Physics Engineering (B.Eng.), 12/2011 – 06/2015, Universitas Gadjah Mada, Indonesia Mechanical Engineering (M.Sc.), 01/2016 – 10/2017. Thammasat university, Thailand
Doctorate	Doctor of Philosophy (Ph.D.), 09/2018 – 11/2021, Hong Kong Baptist University, Hong Kong Time: 01 September 2018 – 22 November 2021 Thesis topic: Understanding Brain-Behavior Relationships via Data-Driven Approach Department: Physics
Stages of academic/professional career	
Postdoctoral research fellow (CvO Young Researcher' Fellowship)	Time: Since 03/2025 Institution: Carl von Ossietzky Universität Oldenburg, Germany Subject: Individual Brain Project: Optimizing Individuality Approaches in Neuroimaging Research
Postdoctoral research fellow	Time: 04/2022 – 02/2025 Institution: Carl von Ossietzky Universität Oldenburg, Germany Subject: METEOR – MastEring ThE OppRessive number of forking paths unfolded by noisy and complex neural data
Postdoctoral research fellow (Joint Fellowship between CvO and HWK)	Time: 07/2022 – 01/2023 Institution: Hanse-Wissenschaftskolleg and Faculty of Medicine, Carl von Ossietzky Universität Oldenburg, Germany Subject: Mining the Adolescent Brain to Create Predictive Profiles of Substance Use Vulnerability
Postdoctoral research fellow	Time: 12/2021 – 02/2022 Institution: Hong Kong Baptist University, Hong Kong Subject: Association Between Cognitive Abilities and Brain Subnetworks
Research assistant	Time: 12/2017 – 03/2018 Institution: National Electronic and Computer Technology Center, Thailand Subject: Software development in the laboratory of Medical Imaging and Computed Tomography

## Supplementary Career Information

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

## Activities in the Research System

I am an active member of Open Science Interest Group (OSIG, <https://uol.de/psychologie/open-science/osig>) in the Department of Psychology, Carl von Ossietzky Universität Oldenburg. One of my projects within OSIG is to develop a guideline for using Artificial Intelligence (AI) in coding activities. Moreover, I also co-organized workshops related to the multiverse analyses in neuroimaging research in several conferences (DPPD 2023, META-REP 2024, incoming PuG 2025). I have been also invited as a speaker on this topic at LMU in October 2023.

## Supervision of Researchers in Early Career Phases

Recently, I have contributed to conceptualize and supervise a research work of a doctoral candidate, Micha Burkhardt. This research work has led to a publication of peer-reviewed article showing the use of Graph Neural Network to predict the similarity of preprocessing outcomes based on text only. Moreover, I have also involved in supervising a number of master theses:

- Methods Comparison for Optimal Individualized Brain Atlas. Cosku Inceler. Ongoing.
- The Interplay between the Anterior Insula and Large-Scale Functional Brain Networks: A Biological Pillar of General Intelligence (g)? Oliver Bruton. Completed – 2024.
- Exploring the Heterogeneity in Autism Spectrum Using Structural and Functional MRI Data. Anas Al-Naji. Completed – 2024.
- Small-World Brain Networks and General Intelligence: Investigating Their Relationship Across Diverse Analytical Decisions. Sumbul Jafri. Completed – 2023.
- Exploring the Association between Gestational Age and Segregation/Integration in the Neonatal Brain - A Multiverse Analysis Approach. Leonardo Zaggia. Completed – 2023.

## Scientific Results

### Category A (Published, peer-reviewed articles)

1. 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>
2. 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>
3. **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>
4. **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>
5. **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>
6. **Kristanto, D.**, Liu, X., Sommer, W., Hildebrandt, A., & Zhou, C. (2021). What do neuroanatomical networks reveal about the ontology of human cognitive abilities?. *iScience*, Volume 25, Issue 8. <https://doi.org/10.1016/j.isci.2022.104706>
7. **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>

8. **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>
9. **Kristanto, D.**, & Leephakpreeda, T. (2017). Sensitivity analysis of energy conversion for effective energy consumption, thermal comfort, and air quality within car cabin. *Energy Procedia*, 138, 552-557. <https://doi.org/10.1016/j.egypro.2017.10.158>
10. **Kristanto, D.**, & Leephakpreeda, T. (2017, March). Energy Conversion for Thermal Comfort and Air Quality Within Car Cabin. In *IOP Conference Series: Materials Science and Engineering* (Vol. 187, No. 1, p. 012037). IOP Publishing. <https://doi.org/10.1088/1757-899X/187/1/012037>
11. **Kristanto, D.**, Wardhana, A., & Rosita, W. (2016) Comparison of Valve Static Friction Detection Method Based on Graphical Fitting. *Journal of Automation, Control, and Instrumentation*. Vol. 8, No. 2. <https://doi.org/10.5614/joki.2016.8.2.4>

### Category B (Pre-print and other scientific contribution)

1. **Kristanto D.** (2025). Advancing Neuroscience Research through a Systematic Knowledge Graph. (preprint).
2. 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. *Neuroscience*. <https://doi.org/10.1101/2025.04.08.647779>. (preprint).
3. Short, C., Breznau, N., Brunsch, 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). (preprint).
4. 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/qsp7x\\_v2](https://doi.org/10.31219/osf.io/qsp7x_v2). (preprint)
5. METEOR: An interactive knowledge space to explore the variability in fMRI preprocessing developed based on human-curated literature information in publication #3 Category A. <https://www.apps.meta-rep.lmu.de/METEOR/>
6. METEOR-mEEG: An interactive knowledge space to explore the variability in mobile-EEG preprocessing developed based on human-curated literature information in publication #1 Category A. <https://meteor-eeg-oldenburg.shinyapps.io/preprocessing/>
7. g-Multiverse: An interactive visualization of the outcomes from a multiverse in publication #4 Category A. <https://meteor-oldenburg.shinyapps.io/ExtendedAL/>
8. Dyslexia-Profiling: An interactive tool to visualize the analytical decisions to perform dyslexia profiling extracted from literature. <https://daniel-develop.shinyapps.io/profilingdyslexia/>
9. Contribution to OSIG in the form of AI-assisted code writing guidelines (<https://uol.de/psychologie/open-science/ai-code-writing-guidelines>) and newsletter (<https://uol.de/psychologie/open-science/osig>, 10th issue onwards)
10. Various coding scripts and teaching materials in GitHub. <https://github.com/kristantodan12>

### Academic Distinctions

1. CvO Young Researcher' Fellowship (March 2025). A 3-year funding as postdoctoral researcher to perform my own research and to establish my own research group through third-party funding.
2. Joint Research Fellowship between HWK and Faculty of Medicine, CvO: A 6-month postdoctoral funding to perform research collaboration involving Faculty of Medicine, CvO and HWK
3. Studentship at HKBU: A fully-funded PhD programme at HKBU.
4. Excellent Foreign Student scholarship: A fully-funded Master's programme at Thammasat University

### Conference contribution as presenter

1. **Kristanto, D.**, Giessing C., & Hildebrandt, A. (2023). The Garden of Forking Paths in fMRI-based Graph Definition: How Different Decisions Affect the Outcomes. Individual Talk at the Conference of Differentielle Psychologie, Persönlichkeitspsychologie und Psychologische Diagnostik (DPPD).
2. **Kristanto, D.**, & Hildebrandt, A. (2023). How to Design Multiverse Analysis in Cognitive Network Neuroscience? Un-conference Talk at the Conference of Society for the Improvement of Psychological Science (SIPS).
3. Jacobsen, N., & **Kristanto, D.** (2023). Tackling the Garden of Forking Paths in the Preprocessing and Analyses of Biophysiological Data via Multiverse Analysis. Symposium at the Conference of Psychology & Gehirn (PUG).

### Invited Talk

1. "fMRI Data Analyses to Investigate Brain-Behavior Relationships", LMU Klinikum, Munich October 4<sup>th</sup> 2023
2. "Taking a Graph Theory Approach to Understand Brain-Behavior Associations", HWK Fellow Lecture, Delmenhorst September 21<sup>st</sup> 2022

### Academic Awards

1. Excellent Foreign Student (EFS) fellowship to pursue Master's degree at Thammasat University.
2. Thammasat University scholarship for outstanding foreign student.
3. Studentship to pursue Ph.D. degree at the Hong Kong Baptist University
4. Joint Research Fellowship between HWK (Hanse-Wissenschaftskolleg) and Faculty of Medicine, Carl von Ossietzky University Oldenburg: 6-month research stay at the HWK
5. Treasure Box program for early career researchers under META-REP (SPP 2317) project: A Multiverse Analysis of Profiling Methods: Subtyping Dyslexia as a Use Case, Leung, Anna and Kristanto Daniel

### Other Working Experiences

1. Teaching Assistant

Time	Subject	Institution
09/2025	Statistics and Programming	CvO
09/2020 – 12/2020 09/2019 – 12/2019	Mathematical Methods for Science	Hong Kong Baptist University
02/2020 – 06/2020 02/2019 – 06/2019	Mechanics	Hong Kong Baptist University
01/2018 – 05/2018	Torsional Loading Experiment	Thammasat University
01/2017 – 05/2017	Cooling Tower Experiment	Thammasat University
08/2016 – 12/2016 08/2017 – 12/2017	Engineering Drawing	Thammasat University
02/2015 – 05/2015	Integrated System	Universitas Gadjah Mada
09/2012 – 12/2012	Computer Programming	Universitas Gadjah Mada

2. Production Engineer

04/2018 – 08/2018 Production engineer for 3D printing machines at Atomicam Co.Ltd., Thailand

May, 2025

Daniel Kristanto