

Curriculum Vitae

Personal Data

Title	Dr.
First name	Daniel
Name	Kristanto
Email	daniel.kristanto@uni-oldenburg.de
Current position	Post-doctoral Researcher
Current institution(s)/site(s), country	Carl von Ossietzky Universität Oldenburg, Germany
Identifiers/ORCID	0000-0003-4729-8839
Children	One, born on 06 September 2020

Qualifications and Career

Stages	Periods and Details
Bachelor	Degree: Bachelor of Engineering in Physics Engineering Time: August 2011 – June 2015 Institution: Universitas Gadjah Mada, Indonesia
Master	Degree: Master of Science in Mechanical Engineering (Research-focused) Time: January 2016 – October 2017 Institution: Sirindhorn International Institute Technology, Thammasat University, Thailand Thesis topic: Modelling of Air Conditions Within Car Cabin via Artificial Neural Networks
Doctorate	Degree: Doctor of Philosophy Time: 01 September 2018 – 22 November 2021 Supervisors: Prof. Changsong Zhou and Prof. Yiu Ming Cheung Institution: Department of Physics, Hong Kong Baptist University, Hong Kong Thesis topic: Understanding Brain-Behavior Relationships via Data-Driven Approach
Stages of academic/professional career	
Research fellow	Time: April 2022 – Now Institution: Carl von Ossietzky Universität Oldenburg, Germany Subject: METEOR – MastEring ThE Oppressive number of forking paths unfolded by noisy and complex neural data
Research fellow	Time: July 2022 – January 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
Post-doctoral researcher	Time: December 2021 – February 2022 Institution: Hong Kong Baptist University, Hong Kong Subject: Association Between Cognitive Abilities and Brain Subnetworks
Research assistant	Time: December 2017 – March 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

Currently, 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. I am working on the project on developing a guideline for using Artificial Intelligence (AI) in coding activities.

Supervision of Researchers in Early Career Phases

Master Thesis Supervision:

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

Scientific Publications

Published Peer-Reviewed Articles

1. **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>
2. **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>
3. **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>
4. **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>
5. **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>
6. **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>
7. **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>

8. **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>

Manuscript on preprint servers and in preparation

1. **Kristanto, D.**, Burkhardt, M., Thiel, C., 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. *bioRxiv*, 2024-01. <https://doi.org/10.1101/2024.01.14.575565>
2. Jacobsen, N., **Kristanto, D.**, Welp, S., Inceler, C., & Debener, S. (2024). Preprocessing Choices for P3 Analyses with Mobile EEG: A Systematic Literature Review and Interactive Exploration. *bioRxiv*, 2024-05. <https://doi.org/10.1101/2024.04.30.591874>
3. Wang, R., **Kristanto, D.**, Gartner, Etienne., Liu, X., Liu, M., Chang, Z., Lui, M., & Zhou, C. (2023). Overlooked weak structural connectivity significantly underlying human cognitive abilities. *Submitted*.
4. Short, C. A., Bosse, R., Debener, S., Jacobsen, N., Özyagcilar, M., Paul, K., Wacker, J., Hildebrandt, A., & **Kristanto, D.** (2024). An open source Python script for transparent and representative sampling from large ERP multiverse analyses. (in preparation).
5. Short, C. A., Schneck, A., Breznau, N., Brunsch, M., Burkhardt, M., Busch, N., Frank, M., Giessing, C., **Kristanto, D.**, Lonsdorf, T., Neuendorf, C., Nguyen, H. H. V., Reusch, M., Schmalz, X., Tabakci, C., & Hildebrandt, A. (2024). Multi-curious: A Multi-disciplinary Guide to A Multiverse Analysis. (in preparation).
6. Leung, A., **Kristanto, D.**, Gießing, C., Ioannidis, J. P. A., Hildebrandt, A., & Schmalz, X. (2024). Multiverse analysis for profiling methods: Application to subtyping developmental dyslexia. (in preparation).
7. **Kristanto, D.**, Burkhardt, M., Debener, S., Thiel, C., Gießing, C., & Hildebrandt, A. (2024). End-to-end Multiverse Analysis Framework and Application. (in preparation).
8. Burkhardt, M., Debener, S., Thiel, C., Gießing, C., Hildebrandt, A., & **Kristanto, D.** (2024). A Reinforcement Learning Approach to Multiverse Analysis in Cognitive Network Neuroscience. (in preparation).

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 4th 2023
2. "Taking a Graph Theory Approach to Understand Brain-Behavior Associations", HWK Lecture Fellow, Delmenhorst September 21st 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
09/2020 – 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

April, 2024
Daniel Kristanto