



Mikolaj Buchwald, PhD

RESEARCH SCIENTIST
PYTHON AI DEVELOPER

mikolaj.buchwald@gmail.com
+1 (310) 270-1060
Los Angeles, CA, USA

Personal Bio

I focus on applied sciences, especially in the area of medicine and psychophysiology. Currently I am a visiting AI researcher at Cedars-Sinai Medical Center in Los Angeles, CA, with my Polish affiliation being Poznan Supercomputing and Networking Center, PAS.

Work Summary

Visiting Postdoctoral Scientist

Cedars-Sinai Medical Center
Los Angeles, CA, USA
Department of Artificial Intelligence in Medicine
October 2023 - present

- Developing AI models for cardiological and radiological sciences
- Deep learning, XGBoost, quantitative medicine, advanced visualization

Postdoctoral Research Specialist

Poznan Supercomputing and Networking Center, Poland
June 2018 - present

- Psychophysiological models for scientific and commercial projects
- R&D Horizon European Commission projects

Graphic designer

ProMedia Sp. z o.o. (LLC)
November 2011 - August 2012

- Preparing marketing materials and logotypes in Corel and Adobe graphics suites

Specialization

- Biomedical data: functional magnetic resonance imaging (fMRI), computed tomography (CT), electroencephalography (EEG), and galvanic skin response (GSR/EDA)
- Technologies: Python, PyTorch, Django, R, Java, Spring, Git, JIRA, Confluence, OpenStack

Education

Adam Mickiewicz University in Poznan, Poland

PhD in Cognitive Neuroscience
October 2017 - November 2021

- Thesis: *Neural representations of planning bimanual grasps of functional objects*
 - Brain function lateralization
 - Neuropsychology
- Head of the PhD Student Council at AMU (2019-2020)

MS in Cognitive Science
October 2012 - June 2017

- Thesis: *Multivariate analysis of functional magnetic resonance data*
 - Graduated with thesis distinguished
- Head of Student Research Group at Institute of Psychology, AMU

Publications

- Buchwald, Przybylski, & Króliczak (2018)
Decoding Brain States for Planning Functional Grasps of Tools: A Functional Magnetic Resonance Imaging Multivoxel Pattern Analysis Study.
Journal of the International Neuropsychological Society
Cambridge University Press
- Behnke, Buchwald, et al. (2022)
Psychophysiology of positive and negative emotions, dataset of 1157 cases and 8 biosignals
Scientific Data, Nature Publishing Group
- Kroliczak, Buchwald, et al. (2021)
Manual praxis and language-production networks, and their links to handedness.
Cortex, Elsevier

More about me

Personal website:
mikolajbuchwald.com

Blog:
mindyourdata.org

Accounts at:
[Google Scholar](#)
[StackOverflow/StackExchange](#)
[ResearchGate](#)
[LinkedIn](#)

Address:
6600 Orange Street, Apt. 205
Los Angeles, 90048 CA, USA