

# Wolf De Wulf

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## Education

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| <b>Doctor of Philosophy (PhD)</b><br>Computational Neuroscience                      | 2023 - Present<br>University of Edinburgh, United Kingdom |
| <b>Master of Science by Research (MScR)</b><br>Biomedical AI                         | 2022 - 2023<br>University of Edinburgh, United Kingdom    |
| <b>Master of Science (MSc)</b><br>Applied Sciences and Engineering: Computer Science | 2020 - 2022<br>Vrije Universiteit Brussel, Belgium        |
| <b>Bachelor of Science (MSc)</b><br>Compute Science                                  | 2017 - 2020<br>Vrije Universiteit Brussel, Belgium        |

## Experience

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| <b>NeuroRSE Intern</b><br>Contributed to Pynapple, a Python package for neural analysis.      | Summer 2024<br>Flatiron Institute, USA             |
| <b>NeuroAI Intern</b><br>Predictive Coding in the Olfactory Cortex, Albeau Lab                | Summer 2024<br>Cold Spring Harbor Laboratory, USA  |
| <b>Autumn School</b><br>Computational Neuroscience & NeuroAI                                  | October 2023<br>Ulster University, United Kingdom  |
| <b>MScR Thesis</b><br>Transformer-Based EMG Decoding for Prosthetic Fingers                   | 2023<br>University of Edinburgh, United Kingdom    |
| <b>MSc Thesis</b><br>Transfer learning in BCIs: Pretrained Transformers for Classifying EEG   | 2022<br>Vrije Universiteit Brussel, Belgium        |
| <b>Machine Learning Engineer</b><br>Developed an ML app to match patients with psychologists. | August 2021<br>Vrije Universiteit Brussel, Belgium |
| <b>BSc Thesis</b><br>Translating Answer Set Programs into Pseudo-Boolean Theories             | 2020<br>Vrije Universiteit Brussel, Belgium        |
| <b>Summer School</b><br>Information & Communication Technologies                              | August 2018<br>Xidian University, China            |

## Teaching

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| <b>Tutor/Marker</b><br>Machine Learning & Pattern Recognition | 2023-2025<br>University of Edinburgh |
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## Awards/Competitions

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| Vrije Universiteit Brussel Prize of Science | 2022 |
| BrEA Student Engineering Prize              | 2022 |
| Sensorium Competition NeurIPS (3rd place)   | 2023 |

## Skills

**Languages:** Dutch, English, French  
**Programming:** Python (Pytorch, JAX), R, MATLAB, C, C++, Java, Scala, Prolog, Lisp  
**Computation:** Virtual Envs (Docker, Anaconda, UV), High Performance Computing (Slurm, Kubernetes)

## Publications

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- De Wulf, W., & Bogaerts, B. (2020). LP2PB: Translating Answer Set Programs into Pseudo-Boolean Theories. *Proceedings 36th International Conference on Logic Programming (ICLP, Technical Communications)*, 325, 206–219. <https://doi.org/10.4204/EPTCS.325.25>
- Gema\*, A. P., Grabarczyk\*, D., De Wulf\*, W., Borole, P., Alfaro, J., Antonio, Minervini, P., Vergari, A., & Rajan, A. (2024). Knowledge Graph Embeddings in the Biomedical Domain: Are They Useful? A Look at Link Prediction, Rule Learning, and Downstream Polypharmacy Tasks. *Bioinformatics Advances*. <https://doi.org/10.1093/bioadv/vbae097>
- Turishcheva, P., Fahey, P. G., Vystrčilová, M., Hansel, L., Froebe, R. E., Ponder, K., Qiu, Y., Willeke, K. F., Bashiri, M., Baikulov, R., Zhu, Y., Ma, L., Yu, S., Huang, T., Li, B. M., De Wulf, W., Kudryashova, N., Hennig, M. H., Rochefort, N., ... Ecker, A. S. (2024, ). Retrospective for the Dynamic Sensorium Competition for predicting large-scale mouse primary visual cortex activity from videos. *The Thirty-Eight Conference on Neural Information Processing Systems Datasets and Benchmarks Track*. <https://openreview.net/forum?id=gViJjwRUIM>
- Vandesande\*, D., De Wulf\*, W., & Bogaerts, B. (2022, ). QMaxSATpb: A Certified MaxSAT Solver. *Proceedings 16th International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR)*. [https://doi.org/10.1007/978-3-031-15707-3\\_33](https://doi.org/10.1007/978-3-031-15707-3_33)

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