

# Wolf De Wulf

wolf.de.wulf@ed.ac.uk | wulfdewolf.github.io | github.com/wulfdewolf

## Education

---

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

## Experience

---

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

## Teaching

---

<b>Tutor/Marker</b>	2023-2025
Machine Learning & Pattern Recognition	University of Edinburgh

## Awards/Competitions

---

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

---

- 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=gViJwRUIM>
- 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)

\* co-first authors