

Gaspard Waage

MSc Cognitive Science at École Normale Supérieure - PSL

Research Interests

Integration of machine learning methods with neuroscience, neural decision-making, dimensionality reduction, (artificial) neural networks

Education

2024–2026 **MSc – Cognitive Science,** *École Normale Supérieure - PSL, Paris*

- Research-based master's affiliated to the Departement of Cognitive Studies (DEC)
- Cognitive Modeling, Neurotheory & AI, Mathematics for Data Science, Machine Learning and Statistical Modeling, Cognitive Neuroscience
- Minor: DATA – courses in AI and Data Science, at PSL (Mines Paris & ENS)

2021–2024 **BSc – Nanobiology, *Cum Laude*,** *TU Delft, Delft*

- Part of the **Honours Programme Delft** (HPD) for Nanobiology
- 1st of Major in: Physics II (10), Biophysics (9.5, *ex æquo*), Computational Science (9.3, *ex æquo*), Systems and Signals (9.5, *ex æquo*).
- Minor: Brain & Cognition, Leiden University, lab internship & courses in the Cognitive Neurosciences

Research

5 months in 2025 **Neural Circuits & Behaviour – Neural Bases of the Decision-Making Process at Circuit and Single Neuron Level,** *Computational analysis of neural circuits underlying competitive interactions between multiple actions in Drosophila*, Cognitive & Network Neuroscience Lab, **CNRS & Paris Saclay University**

6 months in 2024 **Biophysics of Microtubule Spatial Organisation in Synthetic Biology, Control Aster Positioning in Droplets – Bachelor's Thesis in Applied Biophysics**
Manuscript awaiting publication, 3rd author, BioNanoscience Lab, **TU Delft**

3 months in 2023/24 **Does Mind-wandering Predict Forgetting?, Memory Consolidation, Mind-wandering & Autobiographical Thinking: Encoding Tasks – Internship in Cognitive Neuroscience,** S. Varma, **Leiden University**

2 months in 2019 **Prions and Neurodegeneration in Spinal Cord Tissue,** *Exploratory Internship in Neuroanatomy & Neurodegenerative Diseases*, Commissariat à l'Énergie Atomique (CEA), Fontenay-aux-Roses

Teaching Experience

2023 **Teacher's Assistant: Introduction to Nanobiology,** *Given to 1st year students of Nanobiology*, J. Pothof, TU Delft

Languages & Skills

French	C2	German	C1
English	C1+	Danish	A2
Python	Proficient	JavaScript	Intermediate
Pytorch	Basic Knowledge	Tensorflow	Basic Knowledge