

BRAM SILUE

✉ bram.silue@vub.be

📁 EMPLOYMENT

Artificial Intelligence Lab Brussels

DOCTORAL RESEARCHER

Brussels, BE

2023 – Now

- Developing novel reinforcement learning algorithms with enhanced sample efficiency for multi-objective decision-making within computationally intensive stochastic models.

🎓 EDUCATION

Doctor of Philosophy (PhD) in Machine Learning

VRIJE UNIVERSITEIT BRUSSEL

Brussels, BE

2023 – Now

Master of Science (MSc) in Engineering – Computer Science

VRIJE UNIVERSITEIT BRUSSEL

Brussels, BE

2020 – 2023

- Honors: *magna cum laude*.
- Cumulative GPA: **4.0/4.0**.
- Field of study: Artificial Intelligence.

Bachelor of Science (BSc) in Engineering – Electronics & IT

VRIJE UNIVERSITEIT BRUSSEL

Brussels, BE

2016 – 2022

📄 PUBLICATIONS

Efficient Bayesian Ultra-Q Learning for Multi-Agent Games [🔗](#)

W. GAUDERIS, F. DENOUDT, B. SILUE, P. VANVOLSEM, A. ROSSEAU

London, UK

MAY 2023

Adaptive and Learning Agents Workshop (ALA)

🏆 COMPETITIONS

Optiver Challenge – 1st place [🔗](#)

THE UNIVERSITY OF EDINBURGH

Edinburgh, UK

MAR 2024

- Developed a trading system in Python that competes against 20 other teams. The system employs a market-making strategy and leverages sentiment analysis via machine learning to execute directional trades in anticipation of market movements triggered by news.

🔧 NOTABLE PROJECTS

Algorithmic Market Maker [🔗](#)

SKILLS: PYTHON (NUMPY, MATPLOTLIB), SQL

- Simulated and visualized a market maker using the Avellaneda-Stoikov high-frequency trading model. This involved setting bid and ask prices while managing inventory risk. The simulations ran under dynamic market conditions using Brownian motions stored in an SQLite database.

👤 PROFILE OVERVIEW

Technology: Python, Git, Unix, L^AT_EX.

Languages: English (fluent), Dutch (native), French (native), German (intermediate).

Personal Interests: Music Production, Automotive Industry, Fitness, Horology, Investing.

Professional Interests: Quantitative Trading, Machine Learning, Software Engineering, Research.