# Bram Silue

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## 💼 Employment

**Artificial Intelligence Lab Brussels**                     Brussels, BE
Doctoral Researcher                                          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**              Brussels, BE
Vrije Universiteit Brussel                                      2023 – Now

**Master of Science (MSc) in Engineering – Computer Science**    Brussels, BE
Vrije Universiteit Brussel                                      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**    Brussels, BE
Vrije Universiteit Brussel                                        2016 – 2022

## 🎓 Publications

**Efficient Bayesian Ultra-Q Learning for Multi-Agent Games** 📎     London, UK
W. Gauderis, F. Denoodt, B. Silue, P. Vanvolsem, A. Rosseau         May 2023
*Adaptive and Learning Agents Workshop (ALA)*

## 🏆 Competitions

**Optiver Challenge**, HackTheBurgh 2024:     $1^{st}$ place out of 20 teams.     📎

## &lt;/&gt; Notable Projects

**Algorithmic Market Maker** 📎
Skills: Python (numpy, matplotlib), SQL
- Implemented simulations and visualizations of a market maker using the Avellaneda-Stoikov high-frequency trading model. This involved creating an algorithm for setting bid and ask prices while taking into account inventory management and risk, all simulated under dynamic market conditions using Brownian motions stored in an SQLite database.

## 📇 Profile Overview

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| **Technology:** | Python, Git, Unix, LaTeX. |
| **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. |