Bram Silue

➤ bram.silue@vub.be

EMPLOYMENT

Artificial Intelligence Lab Brussels

Brussels, BE 2023 – Now

DOCTORAL RESEARCHER

• 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 2020 - 2023

Vrije Universiteit Brussel

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

London, UK

W. Gauderis, F. Denoodt, B. Silue, P. Vanvolsem, A. Rosseau

Adaptive and Learning Agents Workshop (ALA)

May 2023

T 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 through machine learning to execute directional trades in anticipation of market movements triggered by

news.

</i> ♦ 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, 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.