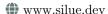
Bram Silue

▽ bram@silue.dev





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**.

Brussels, BE

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

2016 - 2022

Vrije Universiteit Brussel



Optiver Challenge − 1st place **②**

THE UNIVERSITY OF EDINBURGH

Edinburgh, UK

Mar 2024

• Developed a trading system in Python that competed and won 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

Mean-Reverting Portfolio Modeling

SKILLS: PYTHON (PANDAS, NUMPY, SCIPY, MATPLOTLIB)

• Engineered a stochastic model to simulate and analyze the mean-reverting spread between financial assets, utilizing a customized Ornstein-Uhlenbeck process. This includes parameter estimation, improved model fitting for higher-order moments, and Monte Carlo simulations for strategic forecasting.

Limit Order Book Market Making @

SKILLS: PYTHON (NUMPY, SCIPY, THREADING, FLASK, REQUESTS)

• Implemented a synthetic stock market server that runs a limit order book matching engine and handles order requests from market participants, including a market maker agent. The engine simulates a dynamic market environment by processing randomly incoming limit and market orders, resulting in a mid-price that mimics a Brownian motion. The market maker agent, meanwhile, continuously places quotes around the mid-price to provide liquidity, making a steady profit in the process.

PROFILE OVERVIEW

Technologies: 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.