

JOOST VAN KOESVELD

Third-Year Physics & Astronomy Student | Quantitative Modelling | Financial Markets | Python
Utrecht, The Netherlands | +31 6 43627102 | koesveldfreelancing@gmail.com | Born: 9 December 2004

PROFILE

Third-year Physics and Astronomy student at Utrecht University, close to completing the bachelor programme. Strong quantitative background with experience in mathematical modelling, numerical simulation, probability, and scientific reporting. Currently writing a bachelor thesis connecting the Black-Scholes option-pricing framework to asset probability distributions and implied volatility. Interested in high-performance environments at the intersection of finance, technology, markets, and analytical decision-making.

EDUCATION

BSc Physics and Astronomy, Utrecht University | *third-year student; expected completion 2026*

- Relevant strengths: mathematical modelling, numerical methods, statistical reasoning, programming, and scientific communication.
- Bachelor thesis in progress on Black-Scholes, asset probability distributions, option pricing, and implied volatility.

Atheneum (VWO), Science & Technology profile | *completed*

SELECTED ACADEMIC & QUANTITATIVE PROJECTS

Bachelor Thesis - Black-Scholes and Asset Probability Distributions | *in progress*

- Studies how assumptions about an asset probability distribution influence option prices and the implied volatility smile.
- Uses numerical pricing and probability-based reasoning to connect physics-style modelling with financial markets.

Peak Detection in Noisy FFT Signals | *poster project*

- Compared peak-detection algorithms in noisy frequency-domain signals using Python-based simulations and quantitative evaluation.
- Built experience in signal analysis, uncertainty, visualization, and clear technical presentation.

WORK EXPERIENCE

De Barbecue Boer - Self-employed / Freelance Worker | *2025 - 2026*

- Worked in catering and event logistics, requiring preparation, reliability, time pressure, and strong on-site execution.
- Developed customer awareness, practical responsibility, and the ability to perform consistently in a fast-moving environment.

Container Work - Self-employed Physical Labor | *2024 - 2025*

- Performed demanding logistics and unloading work as an independent contractor.
- Managed own administration, invoicing, planning, and professional communication.

YoungOnes - Freelance Worker | *Aug 2022 - Jan 2024*

- Completed assignments across logistics, catering, kitchen work, and dishwashing for different employers.
- Built adaptability, work discipline, and practical problem-solving across varied work environments.

Earlier Work Experience | *2020 - 2021*

- Maintenance worker at De Goudsberg Camping; cultivation worker at Stebi Nursery; cleaner at Menges Cleaning Services.

CANDIDATE SNAPSHOT

Positioning: Analytical physics student with finance interest, practical work ethic, and early exposure to trading and option-pricing concepts

Seeking: Internships, student opportunities, sponsorship conversations, finance/analytics projects, and technology-oriented environments

Strength: Combines quantitative reasoning with self-employed execution and reliability

CERTIFICATES

Optiver Trading Academy Certificate

- Earned certificate after training in trading concepts, market thinking, and decision-making under uncertainty.

Cambridge English Certificate

Basic Bookkeeping Diploma

TECHNICAL & ANALYTICAL SKILLS

Python: Scientific programming, numerical simulations, data analysis, plotting

Quantitative: Probability, statistics, mathematical modelling, numerical methods

Finance: Trading, investing, option pricing, risk, asset distributions

Communication: Scientific writing, poster presentation, client communication

Administration: Self-employed invoicing, planning, bookkeeping basics

INTERESTS

- Quantitative finance and trading
- AI, technology, and markets
- Economics and investing
- Entrepreneurship and business building
- High-performance environments

LANGUAGES

- Dutch - native
- English - advanced
- German - basic

LICENCE

Driving licence B, including trailer

PERSONAL QUALITIES

- Hardworking and disciplined
- Curious and analytical
- Independent and reliable
- Physically fit
- Solution-oriented