

Profile

My work sits where finance, software, and evidence meet: defining a question precisely, building the analytical workflow, testing assumptions, and communicating what the result does - and does not - support. Current public work emphasizes Python, Rust, financial models, market data, deterministic methods, exact contribution, and explicit limitations.

Education

Czech University of Life Sciences Prague

Current

Bachelor's studies in Informatics · Faculty of Economics and Management

Computer-science and information-systems foundation with current emphasis on mathematics, probability, data analysis, research engineering, and quantitative finance.

University of Wisconsin-Madison

2025-2026

Exchange academic year

Coursework across finance, economics, financial modeling, industrial engineering, and computer science.

Selected technical work

Volatility Cascade Engine

Mar 2026 · reproduced Jul 2026

Implemented research prototype · Python · fully synthetic data

- Built a deterministic simulation of leverage, margin thresholds, forced liquidations, and price impact across six synthetic funds and five synthetic assets.
- Published model assumptions, a 2%-30% shock sweep, validation checks, accessible figures, limitations, source, and a versioned technical report.

Merkle Commitments with Poseidon in Rust

May 2026

Work in progress · collaborative repository · Rust · arkworks

- Documented and revised parts of a public Merkle/Poseidon prototype while preserving a clear authorship boundary.
- Added a public warning that current Poseidon parameters are demonstration placeholders; documented that the threshold check remains native and outside zero knowledge.

Technical skills

Programming and analysis

Python, Rust, pandas, NumPy, Matplotlib, NetworkX, Git/ GitHub, APIs, and automation.

Finance and research

Financial modeling, market and options data workflows, scenario analysis, validation, reproducibility, data provenance, research communication.

Current direction

Completing the bachelor's degree, strengthening mathematics and probability, producing a small number of defensible research artifacts, and contributing in quantitative, research-engineering, data, or financial-analytics environments.

Updated 29 July 2026. This résumé does not claim investment-advisory, portfolio-management, institutional, or production-grade status.