Thoran Harry Ignatz Tschöpe

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Profile: MSc in Mathematical Finance with derivatives, fixed income, and time-series training; Munich Re strategy/PM experience; incoming market-making intern and strong stakeholder communication.

Education

MSc in Mathematical Finance and Actuarial Science Technical University of Munich

Expected July 2026
Munich, Germany

- Relevant coursework: derivatives pricing (discrete/continuous time), portfolio theory & asset pricing, fixed income markets, quantitative risk management
- Seminars: trading seminar; time-series methods applied to financial data

BSc in Wirtschaftsmathematik

February 2024

Ludwig Maximilians University Munich

Munich, Germany

- Thesis: "Quasi-Newton-Verfahren: Theorie und Implementierung" (Grade: 1.0)
- Achievements: 1st in Numerical Mathematics (n=167) & Programming 1&2 (n=100+); 2nd in Probability; 3rd in Measure Theory (n=19)

Professional Experience

Munich Re – Data & AI Strategy and Portfolio Team Data Analytics & AI Intern

August – December 2025

Munich, Germany

- Translated underwriting/claims pain points into prioritized analytics/AI use cases with KPIs and ROI hypotheses
- Facilitated cross-regional stakeholder workshops; aligned scope, success metrics, and governance across product, underwriting, claims, and IT
- Prepared decision materials (risk/benefit trade-offs, sequencing); supported PMO tracking of milestones, budget, and dependencies

Technical Projects

- Built low-latency market-data streaming library in C++ (Boost.Asio, multithreading) with **Python** bindings for analysis workflows
- Implemented option-pricing models: Black-Scholes PDE (finite differences) and American options via Monte Carlo (Longstaff-Schwartz) with variance reduction

Competitions

- TUM.ai x Public Makers Hackathon (June 21–22, 2025): 1st place. AI-assisted visa application system; showcased at Federal Foreign Office booth (Smart Country Convention 2025, Berlin)
- Optiver TUM Challenge (June 2, 2025): 4/72. Designed Python market making algorithms on simulated exchange (Optibook) with real-time market data/news
- TUM.ai Makeathon OpenAI Challenge (April 25–27, 2025): 3rd place. Interactive policy simulation with multi-agent dynamics in crisis scenarios

Skills

Markets & Products: derivatives, fixed income, options/volatility

Tools: Python, Excel, C++, R, MATLAB

Strengths: stakeholder alignment, concise communication, fast synthesis under time pressure

Languages

German (Native), English (C2, TOEFL 114/120), French (B1), Spanish (A2)