

## EXPERIENCE

---

- Pinely** Amsterdam, The Netherlands  
*Quantitative researcher/developer* July 2022 - June 2026
  - Improved market-making strategies across different securities, utilizing order-book-based features and machine learning for short-term price prediction.
  - Increased strategy P&L by 30% by adding HFT predictions to MFT alpha execution, improving execution quality, reducing market impact, and enabling strategy scaling.
  - Developed ultra-low-latency arbitrage strategies across different markets, extensively using FPGAs and private market data (execution reports) and applying machine learning models for pricing.
  - Conducted performance research in collaboration with trading system developers to achieve the fastest speed in the market. Led in-depth analysis of exchange-provided order timestamp data (50+ GB daily), designed and executed production tests to identify potential improvements (exchange warm-ups, seat selection, etc.)
  - Adapted team's most profitable ultra-low-latency strategy to a significant exchange infrastructure change maintaining high turnover and profit share.
  - Improved credibility of the backtesting by identifying heuristics for accurate detection of simultaneous events and using production order data.
  - Performed deep packet-level market data research to derive heuristics to detect iceberg / stop-loss orders and utilized this information in the strategy, increasing its profit.
  - Drove team-wide adoption of the ML pipeline, owning the end-to-end research rollout—gathered requirements, coordinated with the developer team, and led onboarding; delivered reproducible, shareable runs that enabled team collaboration and faster iteration.
  - Designed and implemented a daily analytics pipeline to analyze market participants' profits, identify production–simulation discrepancies, and validate market-data assumptions; this pipeline was adopted across multiple markets and significantly reduced researcher support time.
- Tinkoff Generation** Moscow, Russia  
*Competitive Programming Coach* September 2021—November 2022
  - Taught high-school students advanced algorithms and data structures: segment trees, suffix arrays, network flows (max-flow/min-cut), and LCA.
  - Designed and ran weekly training contests; authored editorials and solution walkthroughs.
  - Provided mentoring and problem-solving sessions focused on Olympiad strategies.
  - 10 of 30 students qualified for the final stage of the Russian National Olympiad in Informatics (top 300 nationwide).

## EDUCATION

---

- Higher School of Economics** Remote  
*Bachelor's degree in Applied Mathematics & Computer Science* 2021 - 2025

**Thesis: Dynamic Fee for Reducing Impermanent Loss in Decentralized Exchanges**  
*Published at IEEE ICBC 2025*

  - Problem: Impermanent loss in AMMs; reduce IL while preserving liquidity.
  - Approach: Simulation-based study of dynamic asymmetric fees versus fixed-fee AMMs.
  - Data: Real-world crypto prices + synthetic generated with GBM.
  - Result: Reduced impermanent loss and improved LP markouts without affecting trading activity.
  - Links: [arXiv:2506.03001](#) | [GitHub](#)

## ACHIEVEMENTS

---

- Google Code Jam** 2022  
*Advanced to Round 3, top 250 of more than 30,000 participants*
- Google Code Jam** 2021  
*Advanced to Round 3, top 300 of more than 40,000 participants*
- Russian National Olympiad in Informatics** 2021  
*Winner – top 20 out of more than 100,000 participants*
- Codeforces** 2021  
*Max rating 2530: ranked top 600 among all competitive programmers in the world*