

# Nhut Nguyen, Ph.D.

Software Engineer | Low-Latency Trading Systems  
C++ | Distributed Systems | Trading Infrastructure



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<https://github.com/ntnhut>



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## PROFILE

Software Engineer with 10+ years of experience building and operating real-time trading and financial systems. Strong focus on system integration, production reliability, and performance under tight latency constraints. Experienced working end-to-end across development, deployment, and live support in collaboration with traders, researchers, operations, and international engineering teams.

## CORE COMPETENCIES

- Real-time trading & financial systems
- Event-driven and distributed architectures
- Low-latency & performance optimization
- Concurrency and multithreaded programming
- Production support, observability & debugging
- Clean architecture, testable design & code quality
- Agile development & cross-team collaboration

## WORK EXPERIENCE

DEC 2022 – NOV 2025 (3 yrs)

*Alipes ApS (Denmark)*

### Research Infrastructure Engineer

- Developed and maintained production trading infrastructure supporting real-time market data ingestion, model execution, and downstream consumers.
- Implemented event-driven components with strict latency and determinism requirements.
- Optimized critical paths to meet microsecond-level performance targets in live environments.
- Partnered closely with quants, traders, and operations to deliver and operate systems from specification through go-live.
- Investigated and resolved production issues under live trading conditions, improving system stability and observability.
- Owned core infrastructure components and contributed shared libraries used across research, simulation, and live trading.

DEC 2021 – NOV 2022 (1 yr)

*CLAAS E-Systems Denmark*

### C++ Software Developer

- Modernized and maintained real-time C++ systems with strong correctness and reliability requirements.
- Worked with event-driven architectures and multi-threaded systems on Linux.

AUG 2018 – SEP 2021 (3 yrs 1 mo)

*Synopsys Denmark ApS*

### Senior R&D Engineer

- Developed and optimized large-scale computation-heavy C++ engines used in production.
- Delivered 2x performance improvements through algorithmic and system-level optimization.
- Collaborated across teams in an international, multi-site environment.
- Emphasized testability, maintainability, and performance.

FEB 2016 – JULY 2018 (2 yrs 6 mos)

*Teklatech A/S (Denmark)*

### Software Development Engineer

- Built and optimized numerical and simulation systems with complex data dependencies.
- Focused on correctness, performance, and scalable system design.

## TECHNICAL SKILLS

LANGUAGES C++20/23, Python, C#

SYSTEMS Linux, Docker

TOOLING Git, GitHub, GitLab, CMake  
(CI/CD) Jenkins, TeamCity  
Profiling & benchmarking tools

DEVELOPMENT Agile development, code reviews

PRACTICES Production support  
Performance testing

## EDUCATION

2012 – 2015 **Ph.D. in Math & Computer Science**  
*Technical University of Denmark*

2005 – 2009 **M.Sc. in Algebra & Number Theory**  
*Vietnam National University HCM*

2000 – 2004 **B.Sc. in Math & Computer Science**  
*Vietnam National University HCM*

## LANGUAGES

ENGLISH Fluent

DANISH Limited working proficiency

VIETNAMESE Native