

# Nhut Nguyen, Ph.D.

Senior C++ Software Engineer - Systems & Performance  
Problem Solver & Lifelong Learner



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<https://github.com/ntnhut>



<https://www.linkedin.com/in/ntnhut>

## WORK EXPERIENCE

DEC 2022 – NOV 2025 (3 yrs)

*Alipes ApS (Denmark)*

### Research Infrastructure Engineer

- Implemented, verified and optimized financial algorithms that support high-performance computation and scalability.
- Designed and maintained high-performance C++ systems with strict latency and stability requirements.
- Worked on multi-threaded, low-level components where correctness and determinism are critical.
- Debugged complex runtime issues using profilers and low-level diagnostics.
- Collaborated with tech and quants to improve model accuracy and performance.
- Developed and maintained internal tools and libraries to streamline research and development processes.
- Prepared documentation, conducted code reviews, and presentations.

DEC 2021 – NOV 2022 (1 yr)

*CLAAS E-Systems Denmark*

### C++ Software Developer

- Developed C/C++ software for AUTOSAR-based embedded systems with strong focus on robustness and long-term maintainability.
- Worked in regulated, hardware-integrated environments similar to safety-critical systems.
- Modernized the base software for smart cameras in agricultural machinery with the new Embedded IT platform.

AUG 2018 – SEP 2021 (3 yrs 1 mo)

*Synopsys Denmark ApS*

### Senior R&D Engineer

- Designed and developed software for the computer-aided design of next-generation microchips.
- Improved the robustness of the timing optimization engines to 95% and their performance to 2x.
- Analyzed, refactored, and extended large legacy C++ codebases.

FEB 2016 – JULY 2018 (2 yrs 6 mos)

*Teklatech A/S (Denmark)*

### Software Development Engineer

- Modeled the Power Delivery Network with all complex connections.

AUG 2012 – OCT 2015 (3 yrs 3 mos)

*Technical University of Denmark*

### Employed Ph.D. Student

- Provided an explicit construction for asymptotically Error-Correcting Codes using the theory of Drinfeld modular curves in Algebraic Geometry and Number Theory.

JAN 2005 – JUL 2012 (7 yrs 7 mos)

*Vietnam National University HCM – School of Science*

### Lecturer

- Designed, gave lectures on Algebra Computer Systems, Cryptography, Coding Theory, Arithmetics.

## SOFTWARE DEVELOPMENT SKILLS

ARCHITECTS	Agile, OOP, TDD Multithreaded Programming
LANGUAGES	C++23, Python
PLATFORMS	Windows, Linux
TOOLING	Visual Studio, VS Code, CMake Git, GitHub, GitLab YouTrack, Jenkins, TeamCity
COMMUNICATION	Teams, Slack Documentation, Code Review

## 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*

## INTERESTS

WRITING	Books, Blogs, Social Posts
SPORTS	Football, Badminton, Swimming
OTHERS	Learning Everyday

## LANGUAGES

ENGLISH	Fluent
DANISH	Limited working proficiency
VIETNAMESE	Native