

# Nhut Nguyen, Ph.D.

High-performance C++ Engineer  
Problem Solver & Lifelong Learner



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## WORK EXPERIENCE

DEC 2022 – PRESENT (3 yrs)

*Alipes ApS (Denmark)*

### Research Infrastructure Engineer

- Implement, verify and optimize financial algorithms that support high-performance computation and scalability.
- Ensure the trading predictions run in microseconds using modern low-latency C++, multithreading, and CUDA.
- Collaborate with tech and quants to improve model accuracy and performance.
- Develop and maintain internal tools and libraries to streamline research and development processes.
- Prepare documentation, conduct code reviews, and presentations.

DEC 2021 – NOV 2022 (1 yr)

*CLAAS E-Systems Denmark*

### C++ Software Developer

- Developed software modules in C/C++ for AUTOSAR-based automation applications on embedded devices.
- 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.

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 – DEC 2015 (3 yrs 5 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 and supervised students on Algebra Computer Systems, Cryptography, Coding Theory, Arithmetics.

## SOFTWARE DEVELOPMENT SKILLS

ARCHITECTS	Agile Software Development Object-Oriented Programming Test-Driven Development Multithreaded Programming
PROGRAMMING LANGUAGES	C++23, Python C, C#
AI TOOLS	ChatGPT, Claude, Copilot
OTHERS	VS Code, Rider CI/CD, Git, GitHub, GitLab Linux, Docker, CMake YouTrack, Jenkins, TeamCity
COMMUNICATION	Teams, Slack Documentation, Code Review

## EDUCATION

2012 – 2015	<b>Ph.D. in Math &amp; Computer Science</b> <i>Technical University of Denmark</i>
2005 – 2009	<b>M.Sc. in Algebra &amp; Number Theory</b> <i>Vietnam National University HCM</i>
2000 – 2004	<b>B.Sc. in Math &amp; Computer Science</b> <i>Vietnam National University HCM</i>

## INTERESTS

GIVE A WAY	Free, Open-source Projects, Books
WRITING	Books, Blogs, Social Posts
SPORTS	Football, Badminton, Swimming
OTHERS	Learning Everyday

## LANGUAGES

ENGLISH	Fluent
DANISH	Limited working proficiency
VIETNAMESE	Native