Nhut Nguyen, Ph.D.

Senior GPU & High-performance C++ Engineer

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WORK EXPERIENCE

DEC 2022 – NOV 2025 (3 YRS)

Alipes ApS (Denmark)

Research Infrastructure Engineer

- Designed and implemented performance-critical components in modern low-latency C++ and CUDA to support real-time trading predictions.
- Ensured inference/decision pipelines operate at microsecond latencies via careful kernel tuning, multithreading, and memory-layout optimizations.
- Implemented profiling and benchmarking workflows to measure throughput, latency and resource use; iterated on hotspots identified by profilers.
- Built internal libraries and tooling to standardize performance testing and to ease integration of algorithmic code into production research stacks.
- Collaborated closely with quants and system engineers to translate algorithm requirements into GPU-friendly implementations.

DEC 2021 – NOV 2022 (1 YR)

CLAAS E-Systems Denmark

C++ Software Developer

- Developed and modernized embedded C/C++ modules for AUTOSAR-based systems; experience with constrained environments and cross-compilation workflows.

AUG 2018 – SEP 2021 (3 YRS 1 MO)

Synopsys Denmark ApS

Senior R&D Engineer

- Developed performance-sensitive software for EDA tools used in next-generation microchip design.
- Improved robustness and runtime performance of core timing engines (2x speedups in key paths), demonstrating strong skills in algorithmic profiling and low-level optimization.
- Worked on software closely linked to hardware considerations — gaining intuition for hardware resource constraints and parallel execution.

FEB 2016 – JULY 2018 (2 YRS 6 MOS)

Teklatech A/S (Denmark)

Software Development Engineer

- Modeled complex hardware systems (Power Delivery Network), applying numerical and systems thinking relevant to performant simulation and dataflow problems.

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	Object-Oriented Programming Test-Driven Development Multithreaded Programming
LANGUAGES	C++23, CUDA, Python
TOOLING	CI/CD, Git, GitHub, GitLab Linux, Docker, CMake YouTrack, Jenkins, TeamCity

EDUCATION

2012 – 2015	**Ph.D. in Math & Computer Science** Thesis: Asymptotically Good Codes *Technical University of Denmark*
2005 – 2009	**M.Sc. in Algebra & Number Theory** Thesis: Group-based Cryptography *Vietnam National University HCM*
2000 – 2004	**B.Sc. in Math & Computer Science** Thesis: Face Detection *Vietnam National University HCM*

INTERESTS

WRITING	Books, Blogs, Social Posts
SPORTS	Football, Badminton, Swimming

LANGUAGES

ENGLISH	Fluent
VIETNAMESE	Native