

# Nhut Nguyen, Ph.D.

Senior Software Engineer (C++|Python) Trading Systems  
High-performance systems | Quantitative engineering



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## PROFILE

Senior software engineer with 10+ years of experience building production-grade systems in trading, analytics, and performance-critical environments. Strong background in Python and modern C++, quantitative problem-solving, and scalable data-driven platforms. Experienced in collaborating with quants and researchers to bring models from research into robust live systems.

Currently working in high-frequency trading infrastructure, looking to apply the same rigor to energy trading and data-driven decision systems.

## WORK EXPERIENCE

DEC 2022 – NOV 2025 (3 yrs)

*Alipes ApS (Denmark)*

### Research Infrastructure Engineer

- Designed and maintained core trading and research infrastructure supporting quantitative strategies in live trading.
- Built Python and C++ systems that connect market data, models, and execution paths with strict performance and reliability requirements.
- Developed data pipelines and internal tooling to ingest, validate, and serve high-quality data to researchers and trading systems.
- Collaborated closely with quants and researchers to productionize models, improve robustness, and reduce time from research to production
- Applied modern software engineering practices: testing, code reviews, CI/CD, documentation.

DEC 2021 – NOV 2022 (1 yr)

*CLAAS E-Systems Denmark*

### C++ Software Developer

- Modernized embedded software platforms used in smart camera systems.
- Worked on large-scale refactoring and system upgrades with a strong focus on reliability and maintainability.

AUG 2018 – SEP 2021 (3 yrs 1 mo)

*Synopsys Denmark ApS*

### Senior R&D Engineer

- Improved robustness and performance of timing optimization engines.
- Delivered 2x performance improvements through algorithmic and system-level optimizations.
- Worked in research-heavy environments translating theory into industrial-grade software.

FEB 2016 – JULY 2018 (2 yrs 6 mos)

*Teklatech A/S (Denmark)*

### Software Development Engineer

- Modeled and simulated complex power delivery networks.
- Built numerical and analytical tools to support engineering decisions.

## CORE SKILLS

LANGUAGES	Python, C++20/23, C
SOFTWARE ENGINEERING	System design & architecture Clean, testable, production code CI/CD, Git, code reviews Linux, Docker, CMake
DATA & QUANTITATIVE	Data transformation pipelines Numerical computing Performance optimization & scalability
TOOLS	GitHub, GitLab Jenkins, TeamCity VS Code, Rider ChatGPT, Claude, Copilot

## 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

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

## LANGUAGES

ENGLISH	Fluent
DANISH	Limited working proficiency
VIETNAMESE	Native