

CUONG NGUYEN

Padova, Veneto, Italy

☎ +39 351 3897337 ✉ nguyencuong6873@gmail.com 💼 [linkedin.com/in/nguyencuong6873](https://www.linkedin.com/in/nguyencuong6873)

Education

University of Padova

Master's Degree in Computer Engineer

September 2023 – Present

Padova, Italy

Hanoi University of Science and Technology

Engineer's Degree in Mechatronics (Talent Program)

September 2016 – July 2021

Hanoi, Vietnam

Experience

Coc Coc Company Ltd.

Software Engineer

July 2021 – August 2023

Hanoi, Vietnam

- Maintained and Improved Query Parser component with a traffic of 8 million queries per day to achieve 125ms of 99th latency percentile (p99 = 125ms) per request.
- Maintained and Improved content aggregators for Search Engine Results Pages (SERP), and middle Metasearcher Engine.
- Maintained and Improved performance and quality of Searcher Engine of 100 Searcher Nodes with a traffic of 150 Request Per Second to achieve p99 = 900ms, p95 = 500ms, p75 = 250 ms of latency percentile per request.
- Applied Machine Learning to Shopping Query Classification service, increasing the quality of Shopping Block and Advertisement Revenue.
- Built AI chatbot backend integrated with Search Engine similar to Microsoft Bing AI chatbot with 70000 active users.

Viettel High Technology Industries Corporation

Software Engineer (Internship)

March 2021 – May 2021

Hanoi, Vietnam

- Worked on 5G Core Network Project.
- Developed Traffic Usage Reporting feature in the User Plane Function (UPF) component.
- Leaned Redis High-Availability Architectures.

Projects

Novousys | *Java, Go, Docker, Kubernetes, PostgreSQL, Envoy*

March 2023 – Present

- Design, Build, and Deploy systems with High Availability and Scalability.
- Benchmark and learn the characteristics of each building block of Data-Intensive Systems such as PostgreSQL, Envoy, Kafka, Zookeeper, Redis, MongoDB, Cassandra, Elasticsearch, ClickHouse, and so on.

Chatbox Application | *Java, Docker, JavaScript, HTML, CSS*

April 2023

- Implemented a Chatbox Application for group text messaging using WebSocket protocol.

External Sorting Tool | *C++*

June 2021

- Implemented a simple version of the Unix sort command.
- Applied External Sorting algorithm to sort a large file with limited memory.

A bare-bones Database | *Java, SQL*

January 2021

- Implemented a Database Management System which supports executing simple transactions in series.
- Implemented B+ tree indices, efficient join algorithms, query optimization, and multigranularity locking to allow concurrent execution of transactions, and database recovery.

BearGit | *C*

November 2019

- Implemented a simple version of Git.
- Implemented status, rm, commit, log, branch, and checkout commands.

Assembler and Linker | *C, MIPS Assembly*

November 2019

- Implemented a simple version of Assembler and Linker for MIPS assembly language.

Technical Skills

Languages: Java, C++, Python, Go, C, Assembly, Matlab, JavaScript

Technologies: Linux, Git, Docker, Kubernetes, PostgreSQL, Envoy Proxy, Redis, Grafana, Prometheus