

NGUYEN HOANG PHUC

19/10/1996

SUMMARY

About me

I am a Backend Developer with few years of experience working on scalable architectures, distributed computing, microservices, and cloud infrastructures for a global enterprise.

EDUCATION & AWARD

2024

• Viettel Programming Challenge 2024

Silver medal - VTP Transportation

□ Hanoi, Vietnam

- Viettel Group
- <https://viettelfamily.com/news/thoi-su/viettel-programming-challenge-tro-lai-voi-giai-thuong-hap-dan>

2018

• Application of Algorithm Certificate

Ranked 104th overall in the international contest

□ SAMSUNG Lab

- Samsung Electronics Vietnam

2018

2014

• Engineer's Degree

Post and Telecommunications Institute of Technology

□ Hanoi, Vietnam

- Major: Software Engineering

2017

• SAMSUNG Talent Program

Selected as 1 of only 13 recipients of the Scholarship from PTIT

□ Hanoi, Vietnam

- SAMSUNG Vietnam Mobile R&D Center

EXPERIENCES

Present

06/2024

• Viettel Post Co., Ltd.

Department Manager

Project: Transportation Management System (TMS)

Java, Microservices, AI-agent, IoT

Stronger come first

- Developed **Smart Transportation Management System** enhances logistics operations through advanced route optimization and real-time shipment tracking. It streamlines load planning to maximize vehicle capacity and reduce transportation costs. The system leverages data analytics to provide actionable insights and automated reporting, improving decision-making and overall efficiency in transportation management.
- The **Smart IoT Project** utilizes ThingsBoard IoT to orchestrate a network of devices, including AI-cameras, fire protection systems, truck sensors, and warehouse sensors. This platform enables real-time monitoring and data aggregation, feeding into a **Digital Twin System** for enhanced predictive analytics and decision-making. By integrating these technologies through ThingsBoard, the project optimizes resource management and improves safety and efficiency across logistics operations.
- Highlight modules:
 - Camera AI
 - Smart IoT Lock
 - AI-Powered Vehicle Routing Optimization
 - Odometer OCR Scanning
 - GPS tracking and trip history
 - 24/7 Monitoring & Playback

CONTACT INFO

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SKILLS

Programming:

Java

Dart (Flutter)

Frameworks:

Quarkus

Spring Webflux

Familiar with:

JVM, Compiler

MongoDB

Postgresql

MariaDB

Kafka

Kubernetes

Prometheus

Grafana

VictoriaMetrics

Project Reactor

Architectures:

Microservices

Clean Architecture

Cloud Native Application

Coding style:

Reactive Programming

SOLID

English:

B1+

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Created on 16 Dec 2025

05/2024
|
09/2023

• Viettel Post Co., Ltd.

Tech Leader (fulltime - 9 months)

Project: Warehouse Sorting System (Robot, Crossbelt, DWS)

Java, Microservices, IoT, Edge Computing

Stronger come first

- Developed **Warehouse Sorting System** for logistics and warehousing, featuring crossbelt sorters, DWS (dimensioning, weighing, scanning) systems, and especial robotic automation across all Viettel Post sortation centers and customers. Using microservices and **Edge Computing** to build distribution system for handling more than 20,000 goods each minute. Building dynamic scenario by **Rulebase engine**.
- Implement base projects, core platform, library for Viettel Post Projects: MongoDB, Redis, PostgreSQL, MariaDB, MSSQL Server, Oracle R2DBC, S3, Rulebase Engine, Hazelcast, OAuth2Caller, Open Telemetry...

08/2023
|
04/2023

• Aargauische Kantonalbank

Backend Development Engineer (remote - 5 months)

Project: Endpoint Security System

Java, SQL, Microservices

Stronger come first

- Implement multi-tenancy mechanism for incoming requests, support routing to several databases each tenant.
- Develop and maintain API serving security system using Spring MVC, interact with SQLServer, MySQL by MyBatis.

03/2023
|
11/2019

• Viettel High Technology Industries Corporation

Backend Development Engineer (fulltime - 3 years)

Project: NFV Management and Orchestration System

Cloud Native, Java, MongoDB

Stronger come first

- Developed the 99.99% uptime system which monitors more than a million data points per second of 1000 applications, 200 physical servers, 1000 virtual machines using **Prometheus** and **VictoriaMetrics**, implement and optimize flexible **PromQL** queries for statistic, performance report via email, subscription. Autoconfigure **alerting** and scraping of difference monitored targets.
- Implemented Clustering mechanism for ~50 instances of all microservices in system adapted from scalability, high availability and keep consistency in distributed system using **Raft Consensus Protocol/Algorithm**.
- Transformed all microservices from Java **JIT to AOT** by using GraalVM (profiling, agent tracing) to build applications with ~50x startup faster, ~5x lower memory footprint and spending less time doing garbage collection.

11/2021
|
06/2020

• Aspired Inc

Mobile Application Developer (remote - 1 year 6 months)

Project: The Aspired

iOS/Android, Social, E-commerce Application

- Develop The Aspired iOS/Android Application by cross-platform **Flutter** on mobile/tablet. Working with Jira and Agile, Scrum
- Non-profit project

10/2019
|
09/2018

• SAMSUNG Mobile Vietnam R&D Center

Software Engineer

Project: SAMSUNG MyFiles

Android P/Q/R, File Manager

- Develop SAMSUNG MyFiles Application on **Android** P/Q/R platform.
- Joined via SAMSUNG Talent Program.