

# NGUYEN HOANG PHUC

19/10/1996

## SUMMARY

### About me

I am a Backend Developer with more than 3 years of experience working on scalable architectures, distributed computing, microservices, and cloud infrastructures for a global enterprise.

Excellence at designing and developing cloud native applications across multiple APIs, third-party integrations and NoSQL databases, passionate and hardworking when faced difficult problems.

Have a big love for algorithm.

### Career Direction

In the next few years I want to develop a higher-level system with larger size, user, huge faced difficult problems and multiple new technologies. As more things have been successfully done, as more knowledge i taken from the worked, which will help me on the path to be a skillful Software Engineer.

## EXPERIENCES

### Backend Development Engineer

*Aargauische Kantonalbank (fulltime)*

*Project: ESS*

Java, SQL, Microservices

*Stronger come first*

- Implement complex business logic for large amount of **Kafka** consumers, using high performance communication way **GRPC** for calling between microservices.
- 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**.
- Review team member pull request, ensure that the code follows SOLID principles, verify Java coding convention...
- Maintain and write stored procedure in **SQLServer** and **MySQL** handling business logic of ~500 tables.

### Backend Development Engineer

*Viettel High Technology Industries Corporation (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. Auto-configure **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.
- Conducted messaging broker **RabbitMQ** integrating, for keeping ~200 messages/sec each microservice at a safe place to live until consumer handled.

## CONTACT INFO

Hanoi, Vietnam

+84 373 613 293

<https://hoangphuc-ptit.github.io>

[nguyenhoangphuc.ptit@gmail.com](mailto:nguyenhoangphuc.ptit@gmail.com)

## SKILLS

### Programming:

Java

Dart (Flutter)

### Frameworks:

Project Reactor

Quarkus

Spring Webflux

### Familiar with:

Prometheus

VictoriaMetrics

JVM, Compiler

Grafana

Git

Kubernetes

RabbitMQ

Jenkins

### Architectures:

Microservices

Clean Architecture

Cloud Native Application

### Coding style:

Reactive Programming

SOLID

OOP

### Databases:

MongoDB

MySQL

SQL Server

### English:

B1+

*Created by Hoang Phuc*

Present  
|  
06/2023

03/2023  
|  
11/2019

- Co-worked with outsource team to build **UI website**, to managed data of whole system monitoring configuration/vision. With important **features**: alerting, metric graph chart, visualized monitoring configuration.
- Developed microservice to monitor/manage all microservices in the system, using Jenkins to deploy microservices running on Kubernetes, support Canary Update.
- Other: environment automatic setup/deploying scripts, regex designing.

11/2021  
|  
06/2020

## Mobile Application Developer

*Aspired Inc (remote - 1 year 6 months)*

*Project: The Aspired*

iOS/Android, Social, E-commerce Application

- Available on [App Store](#) & [CH Play](#).
- Develop The Aspired iOS/Android Application by cross-platform **Flutter** on mobile/tablet. Working with Jira and Agile, Scrum
- Technologies: Flutter, Testflight, Google Cloud Platform, Material Design, User Interface Guideline.

10/2019  
|  
09/2018

## Software Engineer

*SAMSUNG Mobile Vietnam R&D Center (fulltime - 1 year 2 months)*

*Project: SAMSUNG MyFiles*

Android P/Q/R, File Manager

- Available on [CH Play](#).
- Develop SAMSUNG MyFiles Application on **Android** P/Q/R platform.
- Technologies: Clean Architecture, Databinding, Livedata, Room Persistence, View Model, MVP.
- Joined via SAMSUNG Talent Program.

## EDUCATION & AWARD

2022  
|  
2021

## 2x Advanced typical labor

Viettel High Technology Industries Corporation

□ Hanoi, Vietnam

- As known as Lao dong tien tien
- Achievement

11/2020

## Mobile Application UI/UX Design

Capi Creative Agency

□ Hanoi, Vietnam

- Certificate

2018

## Application of Algorithm Certificate

Samsung Electronics Vietnam

□ SAMSUNG Lab

- Certificate

2017

## SAMSUNG Talent Program

SAMSUNG Vietnam Mobile R&D Center

□ Hanoi, Vietnam

- Scholarship

2018  
|  
2014

## Engineer's Degree

Post and Telecommunications Institute of Technology

□ Hanoi, Vietnam

- Major: Software Engineering