📱 (+84) 987 816 461 | 🜌 anhldbk@gmail.com | 👑 February 28th, 1987 | ل 👫 https://bigsonata.com/ | 🖸 anhldbk | 📓 anhldbk | 🖬 anhldbk | 🕅 anhldbk

"We make a living by what we get, but we make a life by what we give", Winston Churchhill

# Summary.

Experienced and impactful engineering leader, blogger and speaker. I am motivated and enthusiastic by new challenges in technology, business & product. My latest adventure is still in Payments industry at Nab (National Australia Bank).

I love open engineering culture & growing people also. In my free time, I enjoy reading, writing & jogging.

# Work Experience

## Nab Innovation Centre of Vietnam (NICV)

### ENGINEERING MANAGER

I've been serving a vibrant team in International Payments domain

### ZaloPay (VNG)

### ENGINEERING MANAGER

- Built Push services for marketing campaigns
- Designed an overall architecture and implemented Log Collector (Java, Rocksdb & Kafka), a scalable 40k rps service for collecting logs from user-end devices
- Led a team to develop a double-entry ledger (Java, Tidb, Redis). The ledger is capable of handling 5k+ tps. I also saw a problem when dealing with hotspots which are accounts have many transactions during promotion campaigns. We developed a solution to linearly scale hotspots to support any campaigns. The solution also makes it easier for developers to integrate and FA executive to operate.
- I initiated various company-wide program to make ZaloPay open, including: Open Source, InnerSource, Blogging. I'm also the host of internal tech talk events.
- I'm the mastermind behind ZaloPay Edu, a comprehensive training program for engineering freshers since 2018. I also mentored them to contribute into various open-source projects, e.g. Redis, Tidb.

### Zalo (VNG)

SENIOR SOFTWARE ENGINEER

· Had research to improve caching for Zalo edge services

### **Evolas**

### COFOUNDER

• This is a failed startup about smart homes. I was responsible for implementing software for edge gateways using MQTT.

### Viettel

### ENGINEERING MANAGER

- Led a team to build a massive-scale social listening product using open source components including: crawlers (written in Java & Scala), messaging (using ActiveMQ & Protobuf), analytics (using Spark, Python Scikit-learn) and storage (with HBase, Redis, ElasticSearch, MySQL)
- Researched on Statistics, NLP (Natural language processing) for sentiment analysis. I worked under the mentorship of several PhDs. They helped me efficiently learn & improve my knowledge on Machine Learning
- Optimized performance for Python microservice using ZeroMQ & Greenlet. I contributed into Gensim, a topic modelling framework, to speed up its nearest neighbour search (doc2vec)

### **MV Corp.**

SOFTWARE ENGINEER

- Conducted various researches on Big Data technologies (Hadoop stack), Machine Learning & Text Mining algorithms such as SVM, Neural Network, Ensemble method, TF-IDF ... for detecting trends, related topics.
- Led a project of building a large-scale crawler based on Apache Nutch for collecting information from web and social networks

### Hanoi University of Science and Technology

### TEACHING ASSISTANT

· Gave lectures on Network programming & Security

### **Bkav Security Division, Bkav Corp.**

### SECURITY LEAD

- Diving deeper into Application Security, I helped Bkav to provide services to secure computing systems.
- · Later I felt in love with building products when leading a team to develop Bkav SecureDns for mass users



Ho Chi Minh City, Vietnam Oct 2017 - May 2023

# Hanoi, Vietnam

May 2017 - Oct 2017

Ho Chi Minh City, Vietnam

Mar 2016 - Dec 2016

Hanoi Vietnam

# Oct. 2014 - Mar. 2016

# Hanoi, Vietnam

2013-2014

Hanoi, Vietnam

# Hanoi, Vietnam

2010-2013

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## Bkav Security Division, Bkav Corp.

SECURITY INTERN

- Researched extensively on Application Security, Reverse Engineering, Windows kernel system...
- Discovered several critical vulnerabilities in popular applications. The very first vulnerability of Google Chrome was submitted by me
  Presented my paper entitled "Unicode shellcode and improvements" at Bellua Cyber Security conference (2008). In the paper I demonstrated
- a novel idea on optimizing size of Unicode shellcodes.

# **Presentation**\_

## Mobile Day 2022

PRESENTER FOR <CHAOS ENGINEERING AT ZALOPAY>

- Introduced how my team ensure resilience for the most-critical system in ZaloPay with Chaos Engineering
- Introduced how we found and fixed a bug in Split-brain protection for Redis.

## **Bellua Cyber Security Conference**

Speaker for <Unicode Shellcode & Improvements>

• Introduced optimization techniques for Venetian Method to reduce size of Unicode Shellcode

# Writing\_

ZaloPay Engineering	Blog, https://engineering.zalopay.vn/
<ul> <li>FOUNDER, BLOGGER &amp; EDITOR</li> <li>I created a platform &amp; process for engineers sharing their stories while building ZaloPay</li> <li>Very first blogs were wrote by me &amp; my team</li> </ul>	2018-now
LinkedIn	
Оwner • Recently I've found it's easier to write on LinkedIn. I usually publish posts/articles about engineering & leaders	2016-now ship.
BigSonata	Homepage, https://bigsonata.com/
OWNER • My random thought about technology & life	2018-now
Education	

HUST (Hanoi University of Science and Technology)	Hanoi, Vietnam
M.S. IN COMPUTER ENGINEERING	Sept. 2011- July. 2013

# HUST (Hanoi University of Science and Technology)

B.S. IN COMPUTER ENGINEERING

Coursera
2022
Coursera
2022
Coursera
2017

# Extracurricular Activity\_

Jarkata, Indonesia

Hanoi, Vietnam

Sept. 2005- July. 2010

Hochiminh, Vietnam

Nov. 2008

Jun. 2022

## ZaloPay Open Source

# Founder & Maintainer

- I created a process for engineers to publish their open-source projects
- I'm also the maintainer of several projects, e.g. zalopay-oss/go-advanced, zalopay-oss/zalopay-edu

# Vietnam Data Scientists

Founder & Administrator

- I founded the group in 2015 to share my learning about Big Data first.
- The members have been grown fast (20k+ people as of Dec 2022). I worked with other administrators to manage day-to-day posts & organize various activities.

## **Open Source**

Contributor

• I contributed in several Open Source projects, e.g: MQTT.js, gensim, Apache Avro, Redis, Redhat Quarkus, Microsoft Dapr

2015-now

2015-now

fb.com/groups/vietnam.data.scientists