hungnd1235@gmail.com | 84 96 547 67 30

HUNG NGUYEN-DUY

EXPERIENCE

Viettel Network, Hanoi, Vietnam

Software Engineer & Data Scientist in Viettel Geolocation project, July 2018 - now

- Viettel Geolocation is a product which helps telecommunication engineers optimize network KPIs in different areas. In order to provide these insights, the product leveraged big data platforms (Hadoop ecosystem, Spark, Flink) and localization techniques (determining the position of user equipment (UE) based on records exchanged between it and the network) to process millions of records.
- I researched and implemented a method to estimate the UE positions where the network events happened (written with Spark in Scala language).
- I researched and implemented the method to automatically determine network coverage holes where the KPIs were at a level lower than expected.
- I specified data model and wrote jobs in Spark (mainly batch job, written in Scala) to calculate network KPIs associated with each user and each region.
- I wrote web services (in Java) for serving user requests (in a number of modules).
- I used Python for fast creation of prototypes and for analytic tasks.

Viettel Network, Hanoi, Vietnam

Big Data Intern in Viettel Geolocation project**,** July 2017 - July 2018

Network Communication Technology Laboratory, Hanoi University of Science and Technology, Hanoi, Vietnam

*Researcher***,** July 2016 - July 2017

- I worked on a project which apply reinforcement learning techniques to optimize the data transmission between sensors in Wireless Sensor Networks. In this project, I worked as a researcher and propose Q-learning based algorithm for a node to transmit/receive data from others, which resulted in better energy-efficiency.
- I worked as a teaching assistant in the summer school co-organized by NCT lab and Shibaura Institute of Technology. The summer school aimed at providing practical skills for building IoT projects by working with real sensors and pragmatic network protocols.

SKILLS

Technical Languages: C, Java, Python, Scala, Javascript, Shell, SQL

Operating Systems: Linux (Debian-based distros), Microsoft Windows

Language Proficiency: Vietnamese (native), English (IELTS - 7.0)

EDUCATION

Hanoi University of Science and Technology (HUST), Hanoi, Vietnam

Engineer in Information Technology, Talent Program, School of Information and Communication Technology

Very Good degree, GPA: 3.46

Nguyen Trai High School for Gifted Students, Hai Duong City, Hai Duong, Vietnam

Specialized class of Mathematics, 2010 - 2013

ACHIEVEMENTS

Second prize, National Mathematics Olympiad (2013), Vietnam

Fourth prize, Mathematics Olympiad for Students (Algebra and Calculus - 2014), HUST, Hanoi, Vietnam

Scholarship for Excellent Students in 2014 and 2015**,** HUST, Hanoi,, Vietnam

Top 10 researches, Scientific Research Contest for Students in 2017, HUST, Hanoi, Vietnam

PUBLICATIONS

Event localization method for UMTS (3G) network

Patent (pending), co-author, submitted in Vietnam in 1st quarter, 2019.

Co-author of three reference books for Vietnamese high school students

Vietnamese titles: "Rèn luyện tư duy công phá Bất đẳng thức", "Chinh phục tích phân, lượng giác trong đề thi quốc gia THPT" and "Chuyên đề bồi dưỡng học sinh giỏi qua các kỳ thi Olympic Toán".

CERTIFICATIONS

Machine Learning, Coursera, in September 2017

brought by Stanford University, Andrew Ng.

The course provided basic knowledge about machine learning, including supervised learning, unsupervised learning, reinforcement learning. It further introduced a number of supervised/unsupervised algorithms.

Deep Learning Specialization, Coursera, in February 2018.

brought by deeplearning.ai, Andrew Ng.

The series provided basic skills to organize and apply deep-learning skills in real-world projects, including: structuring machine learning projects, parameters optimization, convolutional neural networks and recurrent models.

Scala Specialization, Coursera, in December 2017 (4 / 5 courses)

brought by École Polytechnique Fédérale de Lausanne

This series provided the concept of functional programming, Scala programming language, and the applications of Apache Spark in big data processing.

Data Science with Python, *Coursera, in October 2017*

brought by Michigan University

I participated in Introduction to Data Science in Python and Applied Plotting, Charting & Data Representation in Python courses.

SOCIAL ACTIVITIES

FPT Young Talents, 2015 - 2017

The FPT center for young talents is a group of enthusiastic students coming from different universities located in Hanoi. Our main activities were gathering and sharing knowledge about different aspects of life.

PERSONAL INTERESTS

Hobbies: Reading

Sports: Football, Badminton, Running