QUANG-ANH PHAM

Hanoi, Vietnam
phamquanganh32@gmail.com

EDUCATION

Master of Computer Science 2023 – 2024 (*expected*)
Phenikaa University, Hanoi Vietnam

Bachelor of Computer Science (Honors Program) 2017 – 2021
University of Engineering and Technology - Vietnam National University, Hanoi Vietnam

- GPA: 3.6/4.0 (First-Class Honours)
- Achieve a perfect score of 10.0/10.0 with the thesis "A Hybrid Genetic Algorithm for the Vehicle Routing Problem with Roaming Delivery Locations"

WORK EXPERIENCE

Research Engineer December 2022 – Present
Samsung SDS R&D Center Vietnam

- Study Job Scheduling (Dispatching) Problems with HPC Applications in Cloud Computing Environments

Research Assistant April 2020 – November 2022
ORLab Vietnam

- Work in some industrial projects on healthcare and logistics
- Study variants of the Vehicle Routing Problem.

Research Intern February 2018 – March 2020
ORLab Vietnam

- Learn Combinatorial Optimization, Operations Research, Metaheuristic
- Attend some optimization challenges.

PUBLICATIONS

[1] **A hybrid genetic algorithm for the vehicle routing problem with roaming delivery locations**.
Quang Anh Pham, Minh Hoàng Hà, Duy Manh Vu, Huy Hoang Nguyen.
International Conference on Automated Planning and Scheduling (ICAPS), pages 297-306, 2022.
Rank A* - Acceptance rate ≈ 30%.

[2] **An Efficient Hybrid Genetic Algorithm for the Quadratic Traveling Salesman Problem**.
Quang Anh Pham, Hoong Chuin Lau, Minh Hoàng Hà, Lam Vu.
International Conference on Automated Planning and Scheduling (ICAPS), (in print), 2023.
Rank A* - Acceptance rate ≈ 30%.

[3] **The bike routing problem with energy constraints**. *(under review)*
Yannis Ancelea, Quang Anh Pham, Minh Hoàng Hà, Dante Ben Matellinia, Trung Thanh Nguyen.

PROJECTS

Smart Logistics System January 2021–October 2021
ORLab

- **Scope**: Developing a module that automatically creates a profitable plan for transporting containers based on the information obtained from the logistics system of the customer.
- Communicate with both dev and BA teams from the customer company to define the problem as well as design the solution
- Research, implement and test some efficient algorithms which are then packaged into APIs that can be accessed by the customer system. The created solution **plays an important role in some later successful POCs.**

O-HOS, A Hospital Staff Management System September 2019–December 2020
ORLab

- **Scope:** The system aims to manage the information and job calendar of hundreds of employees at some departments of a large hospital in Hanoi.
- Work as a Business Analyst to collect requirements for a department and co-design DB with the dev team.
- Develop an optimization algorithm to deal with the nurse scheduling problem which results in **reducing the manual planning time from hours to minutes.**

VeRoLog Solver Challenge 2019 September 2018 – March 2019
ORLab

- Topic: Multi-trip and multi-depot vehicle routing problem with rich constraints
- Supervisor: Dr. Ha Minh Hoang
- Co-workers: Vu Duy Manh, Nguyen Huy Hoang
- Take **4th** rank at the final phase

ROADEF/EURO Challenge 2018 February 2018 – June 2018
ORLab

- Topic: Two-dimensional bin-packing problem with defect constraints
- Supervisors: Dr. Ha Minh Hoang, Dr. Do Duc Dong
- Co-workers: Vu Duy Manh, Do Hoang Khanh
- Achieve **6th** rank in the qualification phase

HONORS AND AWARDS

Champion of PROCON Vietnam 2019 December 2019
My team built an AI-based program that outperformed other teams in the competition

The Dean's list Fall 2020
Semester GPA above 3.9 at VNU University of Engineering and Technology

Third Prize of National Informatics Contest 2017
National Informatics Contest is a programming contest for high school students in Vietnam.

SKILLS

Languages: Vietnamese (Native), English (IELTS: 7.0)
Programming Languages: C++ , Python, Java
Tools: CPLEX, Overleaf, Git