# **VU THANH TUNG**

# Quantum software engineer

Tel: +33753298405 | Email: vuthanhtung2016hn@gmail.com | LinkedIn @thanh-tung-vu-2016hn

Language: English (Fluent, C1), French (Courant, B2), Vietnamese (Native)

**Description :** I am searching for an internship of **3.5 months starting from mid-June** in the field of quantum

information.

#### **EXPERIENCE & PROJECTS**

### **DevOps Intern, ARMOR Group, Nantes, France**

06/2022 - 08/2022

- Deployed mock servers communicating via SSH and WinRM for testing jobs on 10 different scheduling tools and compared them over a list of benchmarks.
- Deployed a centralized Rundeck pre-production server in order to further validate the proof of value.
- Researched on a new **logging convention** and adapted it to the system of the company.
- **Deployed mock Docker containers** for **5 different monitoring tools for** studying their functionalities and comparing them over a list of benchmarks.

#### **CERTIFICATE**

# Mécanique quantique, Coursera (École Polytechnique)

7/2022 - 11/2022

- Wave function in different representations and its collapse upon measure.
- **1D quantum barrier** and its application in the field of nuclear physics (Gamow's theory) and optics (frustrated total reflection).
- Mathematical studies on different forms of 1D quantum well and its application in chemistry and semiconductor (Kronig -Penney model).

## **Deep Learning Specialization, DeepLearning.AI**

10/2021 - 4/2022

- Neural networks: Architecture, Optimizers, Regularization, transfer learning.
- Image Processing models: CNN, ResNet, YOLO, U-Net.
- Natural language processing: RNN, LSTM, Attention, Transformer.

### Machine learning, Coursera (Stanford)

7/2021 - 10/2021

### **EDUCATION**

#### **INSA de Rennes**

#### Ingénieur Informatique

09/2019 - Current

Notable subjects:

• OOP and design pattern (Java, UML), Database (Data normalization, B-tree), Data structure & algorithms, Data analysis (PCA, tree methods, clustering), Stochastic process (Queuing theory, death/birth process).

#### Notable projects:

• Sudoku game

09/2022 - 01/2023

- o Designed a complete UML diagram with application of advanced design patterns (Command, Observer, Service).
- o Developed interactive frontend components (Sudoku board, game menu) with Angular.
- o Developed basic backend API services for generating map and save played games with **Springboot.**
- ArchéoMetal

01/2022 - 05/2022

- Developed an interactive 3D environment and **VR manipulation mechanism** for archeologists to better study and interact with artefacts in **Unity3D**.
- Converted information of scanned artefacts into 3D information compatible with Unity.
- Cleaned the mesh of scanned objects in order to enhance the observation quality of archeologists.

## **Korea Advanced Institute of Science and Technologie (KAIST)**

Daejeon, South Korea 02/2023 -06/2023

Exchange program Notable subjects:

• Quantum information I, Reinforcement learning, Deep computer vision, Graph machine learning

#### Hanoi Amsterdam high school for the gifted

Hanoi, Vietnam 09/2016-09/2019

**Specialization: Physics** 

#### SKILLS

Technical skills: Java, Python, Tensorflow, Angular, Springboot, MongoDB, ELK stack, Git.

Quantum information: Qiskit, QFT, Grover, Shor, Simon.