NGUYEN XUAN BINH

|  |  |
| --- | --- |
| ***Phone Number:*** *+358 457 833 5403*  ***Email:*** *xuanbinh.dev@gmail.com* | ***Linkedin****: https://www.linkedin.com/in/xuanbinh/*  ***Github:*** *https://github.com/SpringNuance* |

**Summary**

A dedicated and skilled individual with a strong background in data science and computational engineering. Demonstrates a blend of academic excellence and interdisciplinary working experience in different engineering domains. Seeks a working position to further expand expertise in the Machine Learning/Artificial Intelligence field.

**Education**

* Bachelor of Science: **Computational Engineering** – 2020 - 2023

Master of Science: **Computational Engineering** – 2023 - Ongoing

**Aalto University**, Espoo, Finland

* **Languages:** English (proficient), Finnish (basic), Vietnamese
* **Award:** Aalto School of Engineering Dean’s List 2021-2022 and 2022-2023

**Technical Skills**

* Data science: Machine learning, Artificial Intelligence, Deep Learning,

Probabilistic Methods, Data Mining, Reinforcement Learning, Data Reports

Languages and frameworks: Python, Pytorch, Tensorflow, Power BI, R, Stan, Julia

* Computer Science: Computer Networks, High-Performance Computing,   
  Parallel Computing, Bash scripting, Information Security, basic cloud service.

Languages and frameworks: CSC HPC services, Scala, C++, OpenMP

**Experiences**

* Teaching assistant in Artificial Intelligence course (1 - 4/2023)
* Research assistant at Aalto Mechanical Engineering Department (3/2023 - Now):

Implementing machine learning models and running engineering simulations

* Summer internship advisor in material characterization (6 - 9/2023): Mentoring two internship projects in applied ML in material models, deliver successful results.
* Computational Engineering Project advisor in material optimization (9 – 12/2023): Responsible for advising a graduation project topic for 3 Bachelor-level students.

**Projects**

* [Chat application](https://github.com/SpringNuance/chat_application_GUI-version): software supporting IPv4 and IPv6 network with integrated GUI
* [Abaqus macromechanics](https://github.com/SpringNuance/Abaqus-Macromechanics-Project): Bayesian Optimization of hardening law to fit force displacement curves, which uses CSC service for running simulations.
* [Parallel computing](https://github.com/SpringNuance/Programming-Parallel-Computers): parallelized sorting algorithms, vectorization, GPU utilization
* [Published conference paper](https://www.researchgate.net/publication/370122286_Optimizing_crystal_plasticity_model_parameters_via_machine_learning-based_optimization_algorithms) on applied deep learning in material modeling