



# Thieu Van Nguyen

## Curriculum Vitae

### Current Addr

10, 235 Alley, Yen  
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Vietnam

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### Date of birth

21/02/1995

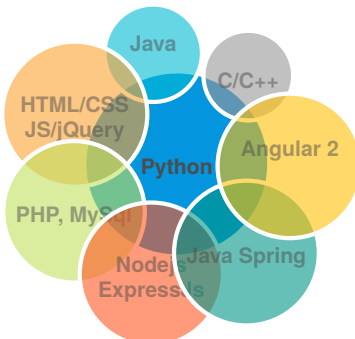
### Websites

Google Scholar  
Researchgate  
ORCID  
Linkedin

### Coding Store

github  
bitbucket  
gitlab

### Programming



## Education

- 10/2018 **Hanoi University of Science and Technology (HUST), Hanoi, Vietnam**  
— School of Information and Communication Technology
- 10/2020  
• Master in Computer Science  
• Courses: Big Data Analysis and Visualization, Machine Learning with Big Data,...
- 09/2019 **University of Luxembourg (UL), Luxembourg**  
— Faculty of Science, Technology and Medicine (FSTM)
- 02/2020  
• Master in Information and Computer Science  
• Exchange program based on framework of Erasmus+2020 scholarship.  
• Courses: Machine Learning, Distributed System, Parallel and Grid Computing, Mathematical Optimization.
- 08/2013 **Hanoi University of Science and Technology (HUST), Hanoi, Vietnam**  
— School of Information and Communication Technology
- 08/2018  
• ICT Talented Engineer Program, GPA: 3.03  
• Courses: Mathematics, Optimization, Information Technology, Computer Science, Data Science.  
• Thesis: "Building a self-organizing neural network for forecasting future cloud resources consumption"

## Research Experience

- 03/2020 **Fukuda Laboratory, National Institute of Informatics (NII), Japan** Lab  
— Researcher Assistant (Mentor: Prof. Kensuke Fukuda)
- 09/2020  
• Computer Network - System Log Causality Analysis  
• Applying deep learning in mining causes of network events in log data with causal inference.
- 08/2017 **High Performance Computing Center (HPCC - HUST), Vietnam** Lab  
— Leader of AI Research Team includes 5 members.
- 10/2020  
**Machine Learning and Deep Learning - ML & DL**  
• Based on historical time series data, build a model to forecast the number of requests to the 1998 World Cup website  
• Predicting Google cluster trace time series data.
- Artificial Intelligence and Computational Intelligence (AI & CI)**  
• Design improved time-series forecasting model based on Neural Network (Self-Structure NNs, Functional Link NNs, ELM, MLP, SONIA,...) and CI (Swarm Optimization, Human-inspired Optimization,...)
- Auto-scaling resources usage mechanism in a cloud server center**  
• Design Decision-making modules based on QoS and SLA in the server.  
• Design auto-scaling system using Forecasting Model and Decision-making modules above to decide turning servers off or on to optimize energy consumption in the cloud server.

## OS Preference

Windows ★★★★★  
GNU/Linux ★★★★★

09/2019

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02/2020

### Parallel Computing and Optimization Group (PCOG), Luxembourg

[Lab](#)

Researcher Assistant (Mentor: Dr. Daniel H. Stolfi)

- Meta-heuristics and Its Application
- Applying bio-inspired algorithms and meta-heuristic algorithms in combinatorial optimization, robotics, and computer simulations.
- Optimizing swarm of UAVs in path planning using CoppeliaSim Simulator.

## Personal Skills



## Languages

Vietnam ★★★★★  
English ★★★★★

## Places Lived



## Awards/ Certificates

02/2020

**Achieved NII International Internship Program for International Exchange Student to National Institute of Informatics, Japan**

[Scholarship](#)

[Certificate Link](#)

07/2019

**Achieved Erasmus+ scholarship for International Exchange Student to University of Luxembourg**

[Scholarship](#)

[Certificate Link](#)

05/2019

**TOEIC 755, (Listening: 390, Reading: 365)**

[TOEIC](#)

[Certificate Link](#)

04/2019

**Being awarded as The Winner in Master Program challenge in Data Science at HUST**

[Challenge](#)

[Certificate Link](#)

11/2018

**Being presented at the AI Innovation in Cloud Computing and IoT conference**

[Conference Presentation](#)

[Certificate Link](#)

06/2018

**Achieved the highest score in a Graduation Defense Council at SoICT-HUST**

[Graduation Thesis](#)

12/2016

**Being certificated of attendance for Big Data Management and Analytics in DASFAA Winter School sponsored by DASFAA and SoICT**

[Certificate](#)

[Certificate Link](#)

11/2012

**Being awarded as Third Prize in Mathematical Competition for high school students at the provincial level**

[Contest](#)

## Research Interests

- **Artificial Intelligence:** Machine Learning, Deep Learning, Supervised Learning, and Recommendation System
- **Soft Computing:** Meta-heuristics, Computational Intelligence, Bio-inspired Optimization, and Global Optimization.
- **Cloud Management:** Resources Allocation, Time-series Data and Auto-scaling System

**Real world Application:** Cloud computing, Inflow and Rainfall Application, UAVs, 5G Network,...

## Publications

- 03/2020 **Thieu Nguyen** Binh Minh Nguyen, Hoang Nghia Bao, and Giang Nguyen (2020) A Novel Workload Prediction Model Using ELM with Opposition-based Tug of War Optimization, (accepted). In: The 11th International Conference on Ambient Systems, Networks and Technologies (ANT-2020) [Conference P.](#)  
+++ Link: Conference
- 09/2019 **Nguyen, T.**, Nguyen, T., Nguyen, B. M., & Nguyen, G. (2019). Efficient Time-Series Forecasting Using Neural Network and Opposition-Based Coral Reefs Optimization. International Journal of Computational Intelligence Systems, 12(2), 1144-1161. [Journal P.](#)  
+++ Link: Journal
- 04/2019 **Nguyen T.**, Nguyen B.M., Nguyen G. (2019) Building Resource Auto-scaler with Functional-Link Neural Network and Adaptive Bacterial Foraging Optimization. In: Gopal T., Watada J. (eds) Theory and Applications of Models of Computation. TAMC 2019. Lecture Notes in Computer Science, vol 11436. Springer, Cham [Conference P.](#)  
+++ Link: DOI
- 10/2018 **Nguyen, T.**, Tran., N, Nguyen, B. M., and Nguyen, G. (2018). A Resource Usage Prediction System Using Functional-link and Genetic Algorithm Neural Network for Multivariate Cloud Metrics [Conference P.](#)  
+++ Link: DOI

## Experience

### Projects

- 10/2019 **Machine Learning Course, Master in Information and Computer Science, UL** [Project](#)  
— Team size: 3, Role: Coder.
- 01/2020
  - Twitter Sentiment Analysis using Support Vector Machine and Neural Network.
  - Built a system which can collect tweets from twitter and automatically classify the sentiment.
- 10/2019 **Parallel and Grid Computing Course, Master in Information and Computer Science, UL** [Project](#)  
— Team size: 3, Role: Coder
- 01/2020
  - Evaluation of GPU-accelerated libraries for computing.
  - Performance comparison between non-accelerated libraries and accelerated libraries.
- 12/2018 **Big Data Integration and Processing Course, Master of Science class, HUST** [Project](#)  
— Team size: 3, Role: Coder
- 03/2019
  - Built a system which can collect, integrate, and process employment data from recruitment websites. The system also can update data periodically automatically, based on the configuration sets.
- 01/2018 **Graduation Thesis, ICT Talented Engineer class, HUST** [GT](#)  
— Team size: 1
- 06/2018
  - Building a self-organizing neural network for forecasting future cloud resource consumption.
  - Grade: A+, Achieve the highest score among 11 thesis defense.
- 09/2016 **ICT Talented Engineer class, HUST** [Class](#)  
— Team size: 1
- 02/2017
  - Built users management system used Java Spring framework and Angular for Engineering Practicum Course
  - Research about Nosql database for Database Design & Management Course
  - Grade: A

02/2016	<b>Project II, ICT Talented Engineer class, HUST</b>	<a href="#">Project II</a>
—	Team size: 2, Role: Reporter	
06/2016	<ul style="list-style-type: none"> <li>• Simulated DDOS attack and analyzed packets captured through Wireshark used Java Swing</li> <li>• Grade: A</li> </ul>	
09/2015	<b>Project I, ICT Talented Engineer class, HUST</b>	<a href="#">Project I</a>
—	Team size: 1	
02/2016	<ul style="list-style-type: none"> <li>• Built message android application with multiple friends at once used Java and Parse.</li> <li>• Grade: A+</li> </ul>	

## Internship

01/2017	<b>Arrow Technologies Viet Nam, Hanoi, Vietnam</b>	<a href="#">Arrow Technologies</a>
—	Team size: 1	
08/2017	<ul style="list-style-type: none"> <li>• Developed a project which manages personal information and daily activities for Japanese organizations, being utilized as a java web application</li> <li>• Designed optimized algorithm to suggest appropriate customer cards for employees</li> <li>• Programming languages: Java spring framework, Angular 2</li> </ul>	
06/2016	<b>Techmaster Viet Nam, Hanoi, Vietnam</b>	<a href="#">Techmaster</a>
—	Team size: 1	
09/2016	<ul style="list-style-type: none"> <li>• Built a online shopping website which using HTML, CSS, JS, Bootstrap.</li> <li>• Built a online course website which used Nodejs, React, MaterializeCSS.</li> </ul>	

## References

### Dr. Binh Minh Nguyen

*Head of Information Systems, School of Information and Communication Technology, Ha Noi University of Science and Technology, 1 Dai Co Viet, Ha Noi, Viet Nam.*

- Email: [minhnb@soict.hust.edu.vn](mailto:minhnb@soict.hust.edu.vn)
- Website: [Link](#)

### Dr. Giang Nguyen

*Institute of Informatics, Slovak Academy of Sciences, Bratislava, Slovakia.*

- Email: [giang.ui@savba.sk](mailto:giang.ui@savba.sk)
- Website: [Link](#)

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Apr 2<sup>nd</sup>, 2020