NGUYEN VAN QUANG

✉ quanguet@gmail.com   www.davidnvq.github.io ⅇ
🐙 github.com/davidnvq   linkedin.com/in/quanguet 🔗

RESEARCH INTEREST

· **Deep Learning**   · **Computer Vision**   · **Natural Language Processing**

EDUCATION

Tohoku University, Japan   *Sept 2017 - Present.*
Master Student in Data Sciences Program   GPA: 4.0/4.0

Daejeon University, South Korea   *Sept 2015- Aug 2016*
Exchange Student in Fostering ASEAN Future Leaders Program   GPA: 4.36/4.5

University of Engineering and Technology, Vietnam   *Sept 2012 - Aug 2017*
Bachelor in Computer Science, The Undergraduate Thesis (scored 10/10)   GPA: 3.88/4.0 (1/450)

High School for Gifted Students, Vietnam National University   *Aug 2009 - June 2012*
Major in Chemistry, First National Chemistry Olympiad Prize in 2012

TECHNICAL SKILLS

Programming Languages	Python, Java, C/C++, Swift
Familiar Operating Systems	Mac OS, Ubuntu, and Windows
Machine Learning Frameworks	Pytorch, Tensorflow, Keras, pandas, numpy
Software Development Experiences	Android, iOS Application, and Web Development

WORK AND RESEARCH EXPERIENCES

Research Graduate Student   September 2017 - Now
Tohoku University - supervised by Prof. Takayuki Okatani, Prof. Tokuymama

· **Visual Dialog**: The current work focuses on building a system which can answer a question based on the image and dialog history provided. We proposed an efficient attention mechanism for multiple inputs in Visual Dialog. This improve the performance to the SOTA on the task.

· **Micro-expression Recognition**: Using CapsuleNet and various CNN models for Micro-expression Recognition. The work was accepted in FG 2019 with available [Code], [Pdf].

· **Micro-expression Spotting**: Using the 3D-CNN model to detect and spot the period of micro-expressions from videos with available [Code].

Machine Learning Research Intern   June 2016 - September 2016
Laboro.AI Inc. - supervised by Dr. Hiromasa Fujihara

· **Face Detection**: The main focus is to detect the hard faces including small, occluded faces from images. The work was accepted in FG 2019 with available [Project Web], [Code], [Pdf].

· **Object Recognition**: My reponsibility to write the Keras scripts for training ResNet101 on ImageNet from scratch (There was no such implementation available on the Internet). The training procedure took 2 weeks to converge with approximately same results ($\pm 0.4\%$) as public pretrained versions on Tensorflow, Pytorch and so on. The company code is closed to public.

Machine Learning Research Intern
July 2016 - August 2016

Software Engineer Incubation Center, Fujitsu Japan

· **Research Project**: Building a system for question answering. I was responsible for investigating and prototyping a deep learning model using transformer blocks to build a system for question answering with the datasets from Fujitsu's clients. The code was only available to internal Fujitsu.

Research Bachelor Student
June 2015 - June 2017

Data Science Laboratory - supervised by Assoc.Prof. Quang-Thuy Ha

· **Research Topics**: Various machine learning algorithms for NLP and medical field.

· **Text classification**: I was working on several models for multi-label text classification. Together with other researchers, we published several papers to the conferences and journal.

· **e-Doctor** Big Data Project: I was responsible for preprocessing more than 1 million medical records from patients taking medical test in Vietnam.

· **Thesis** titled "An algorithm adaptation multi-label classification method and experiments on Vietnamese text" was awarded as the best thesis of the year. The electronic version can be found here.

Web Development Intern
Jan 2016 - March 2016

United Nations Asia Pacific Center for ICT Development, South Korea

· **Work Project**: Front-end development for e-learning website included fixing bugs and maintaining the code.

PUBLICATIONS

1. Efficient Attention Mechanism for Handling All the Interactions between Many Inputs with Application to Visual Dialog   Arxiv 2019
   Nguyen Van Quang, Masanori Suganuma, Takayuki Okatani   [Pdf]

2. CapsuleNet for Micro-Expression Recognition Automatic Face and Gesture Recognition 2019, France
   Nguyen Van Quang, Jinhee Chun, Takeshi Tokuyama   [Code][Pdf]

3. Revisiting a single-stage method for face detection   Automatic Face and Gesture Recognition 2019, France
   Nguyen Van Quang, Hiromasa Fujihara   [Project Web][Code][Pdf]

4. A New Lifelong Topic Modeling Method and Its Application to Vietnamese Text Multi-label Classification   In proceedings of ACIIDS 2018, LNAI 10751
   Quang-Thuy Ha, Thi-Ngan Pham, **Van-Quang Nguyen**, Thi-Cham Nguyen, Thi-Hong Vuong, Minh-Tuoi Tran, Tri-Thanh Nguyen   [Pdf]

5. A New Text Semi-supervised Multi-label Learning Model Based on Using the Label-Feature Relations
   In proceedings of ICCCI 2018, LNAI 11055, UK
   Quang-Thuy Ha, Thi-Ngan Pham, **Van-Quang Nguyen**, Minh-Chau Nguyen, Thanh-Huyen Pham, Tri-Thanh Nguyen   [Pdf]

6. A semi-supervised multi-label classification framework with feature reduction and enrichment
   In Journal of Information Tecommunication, 2018, UK
   Thi-Ngan Pham, **Van-Quang Nguyen**, Van-Hien Tran, Tri-Thanh Nguyen, Quang-Thuy Ha [Pdf]

7. MASS: A Semi-supervised Multi-label Classification Algorithm with Specific Features
   In proceedings of ACIIDS 2017, Studies in Computational Intelligence 710, Japan
   Thi-Ngan Pham, **Van-Quang Nguyen**, Tri-Thanh Nguyen, Quang-Thuy Ha   [Code][Pdf]

8. Social-spam Profile Detection based on Content Classification and User Behavior   In Information Security Conference 2016, Vietnam
Thi-Hong Vuong, Van-Hien Tran, **Van-Quang Nguyen**, Minh-Duc Nguyen, Cam-Van Thi Nguyen, Thanh-Huyen Pham, Mai-Vu Tran

SCHOLARSHIPS AND AWARDS

1. Japanese Government Scholarship (MEXT) for PhD Course	*2019 - 2022*
2. Japanese Government Scholarship (MEXT) for Master Course	*2017 - 2019*
3. Data Science Summer School Scholarship, Gottingen Universrity	*August 2018*
4. Honda Young Engineer Scientist Award for 10 most execellent students in Vietnam	*Sept 2017*
5. Third Prize of National Scientific Student Research Conference	*Sept 2017*
6. Excellent Thesis Award - Best undergraduate thesis (scored 10/10)	*June 2017*
7. First Prize of Scientific Student Research Conference	*June 2017*
8. Excellent Student Award - The valedictorian of QH-2012 batch	*June 2017*
9. AmCham Scholarship - from American Chamber and the US Ambassy	*June 2017*
10. Machine Learning Summer School Scholarship, Kyoto Universrity	*August 2016*
11. Merit-based University Scholarships, UET-VNU	*2013 - 2017*
12. Shinnyo-en Scholarships, awarded in 4 consecutive years	*2012 - 2016*
13. Hoa Trang Nguyen Award, awarded to only 2 recipients from UET-VNU	*2012*
14. The second highest score in University Entrance Examination	*2012*
15. First Prize in National Chemistry Olympiad 2012	*2012*
16. Merit-based New South Wale University Scholarship, Australia	*2012*
17. Telecom Corporation Scholarship	*2012*
18. Odon Vallet Scholarship, France	*2011*
19. Third Prize in National Chemistry Olympiad 2011	*2011*

OTHER INFORMATION

Teaching Assistant	Data Mining, Introduction to Infomatics 1
Languages	English (Advanced) and Japanese (Beginner)
Hobbies	Photography, Running, Table tennis, and Football
Tools	Latex, Adobe, Microsoft Office, Javascript, HTML, CSS.

REFERENCES

1. Prof. Takayuki Okatani	PhD Supervisor	Email: okatani@vision.is.tohoku.ac.jp
1. Prof. Takeshi Tokuyama	Master Supervisor	Email: tokuyama@dais.is.tohoku.ac.jp
2. Doctor Hiromasa Fujihara	Intern Supervisor	Email: fujihara@laboro.ai
3. Assoc. Prof. Ha Quang Thuy	Bachelor Supervisor	Email: thuyhq@vnu.edu.vn