

VIET-NHAT NGUYEN

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District 1, Ho Chi Minh City, Vietnam



EDUCATION

University of Trento, Italy

Master of Science in Computer Science

Graduated with cum laude

Sep 2018 - Oct 2020

GPA 29.16/30

VNU-HCM, University of Science, Vietnam

Bachelor of Science in Computer Science

Graduated with honors, ranked 2nd in CS class

Sep 2013 - July 2017

GPA 8.22/10

PUBLICATION/PREPRINT

- Viet-Nhat Nguyen, Mostafa Sadeghi, Elisa Ricci, Xavier Alameda-Pineda. Deep Variational Generative Models for Audio-visual Speech Separation. In Proceedings of *2021 IEEE 31st International Workshop on Machine Learning for Signal Processing*.
- Shell Xu Hu*, Md Rifat Arefin*, Viet-Nhat Nguyen*, Alish Dipani, Xaq Pitkow and Andreas Savas Tolias. AvaTr: One-Shot Speaker Extraction with Transformers. In Proceedings of *InterSpeech 2021*.
- Mattia Antonino Di Gangi, Viet-Nhat Nguyen, Matteo Negri, Marco Turchi. Instance-Based Model Adaptation For Direct Speech Translation. In Proceedings of *International Conference on Acoustics, Speech, and Signal Processing 2020*.
- Mattia A. Di Gangi, Matteo Negri, Viet Nhat Nguyen, Amirhossein Tebbifakhr, Marco Turchi. Data Augmentation for End-to-End Speech Translation: FBK@IWSLT'19. In Proceedings of *International Workshop on Spoken Language Translation 2019*.

EXPERIENCE

UploadAI LLC, Texas

Machine Learning Engineer (remote contractor)

Dec 2020 - Oct 2021

This is a spin-off from <http://ninai.org> funded by the US Government. Conducted projects related to using brain signals in auditory cortex to build more robust models, adversarial Machine Learning. I built Deep Learning models to address the problem of sound extraction and integrated regularization method derived from EEG data to improve model's robustness.

Inria Grenoble, France

Research Intern at Perception Team

Feb 2020 - Aug 2020

- Addressed the problem of audio-visual speech separation given single-channel microphone mixed speech and video frames of the involved speakers, using CVAE models and probabilistic inference. The project involved in training and applying Machine Learning models on audio and images.
- Result: We built a system that could separate speeches in any types of noisy environments.

Fondazione Bruno Kessler Institute, Italy

Research Intern at Machine Translation group

July 2019 - Oct 2019

- Applied Transformer architecture to Machine Translation

- Developed a novel method based on instance selection technique for speech-translation. Investigate how to extract different types of information from the speech audio focusing on the semantic and prosodic feature of the speech.
- Results: Our translation system improved performance of previous ones and we published 2 papers in international conferences.

VNG Corporation, Vietnam

Jan 2018 - Sep 2018

Data Scientist at AI Lab, Zalo group

- Created new datasets for one of the first AI competitions in Vietnam.
- Researched and applied Deep Learning techniques for many problems in Zalo platform such as: Vietnamese speech synthesis, Vietnamese optical character recognition, etc.

VNG Corporation, Vietnam

Jun 2017 - Sep 2017

Computer Vision Engineer Intern

- Researched and implemented many different algorithms for face detection problem and facial landmark problem. Deployed a demo application on mobile devices.

AI Lab, HCMC University of Science, Vietnam

Feb 2016 - May 2016

Research Assistant

- Assisted with Vietnamese speech synthesis and NLP problems.

SKILLS

- Good knowledge of Machine Learning, Data Processing, Data Crawling techniques.
- Good at algorithms and data structures; Mathematical background.
- Programming: experienced in C/C++ and Python; SQL.
- Experience working with popular libraries such as Scikit-learn, Pytorch, TensorFlow, Keras, Gensim, spaCy, OpenCV, Pandas, Matplotlib.
- Technologies: Git, Linux, Unix shell, L^AT_EX.
- Language: Vietnamese, English.

SCHOLARSHIP

- University of Trento Scholarship for excellent students, 2018, 2019.
- Italian Ministry of Foreign Affairs and International Cooperation scholarship for higher education degree (MAECI scholarship).
- Traveling scholarship for Research Summer School, Duy Tan University, Da Nang, Vietnam, 2018.
- KMS Technology scholarship for excellent informatics student, 2015.

ACHIEVEMENT

- Third prize in the ACM-ICPC Vietnam Southern Provincial Programming Contest, 2016.
- Twelfth place in the ACM-ICPC Vietnam Southern Provincial Programming Contest, 2015.
- Third prize in the Computer Programming Olympiad at HCMC University of Science, 2017
- Certificate of participant for participation in the Elimination Round of CodeChef's "SnackDown 2016".
- Second prize in the Nghe An Province Olympiad in Informatics, 2013.