

# VIET ANH TRINH

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## EDUCATION

**The Graduate Center, The City University of New York, US** 2016-Present  
Ph.D. in Computer Science

- Research interest: Machine Learning, Speech and Language Processing.
- Advisor: Professor Michael I Mandel

**Hanoi University of Science and Technology, Vietnam** 2003-2008  
B.S. in Electronics and Telecommunications

- GPA: 8.16 (Grading scale: 10). Classification: Excellent.
- Ranking: Top 1% of the School of Electronics and Telecommunications

## TECHNICAL SKILLS

- Python, Tensorflow, PyTorch, Keras, Matlab, C, C++, PHP, HTML, Java, Visual Basic, R, MySQL

## RESEARCH EXPERIENCE

**Bubble cooperative networks for identifying important speech cues** 2017

- Developed a network consisting of a generator (Long short-term memory network-LSTM) and a discriminator (LSTM and multilayer perceptron) to identify important time-frequency regions of speech.
- The predicted masks show patterns that are similar to analyses derived from human listening tests, but with better generalization and less context-dependence than previous approaches

**Concatenative analysis-by-synthesis** 2017

- Utilized pitch and intensity information to improve the performance of a feed-forward neural network unit-selection in a concatenative speech synthesizer system. This system aims to produce a high quality clean speech from noisy speech for the task of source separation and speech enhancement.

**Multi-channel speech enhancement** 2017

- Reviewed literature and deployed a baseline method, which estimates noise covariance matrix for the beamforming to improve far field speech recognition.

**Class Project** 2017

- Image classification: Applied convolutional neural network to classify images on CIFAR-10 dataset
- Grammatical error correction: Used an encoder-decoder recurrent neural network to correct English grammar errors on the CoNLL-2014 shared task
- Music composer classification: Used Support Vector Machines, Logistic Regression, K-Nearest Neighbors to recognize composer of a music piece
- Traveling Salesman: Used parallel genetic algorithm to find the shortest path that covers all the cities

**Intrusion Detection System** 2008

- BS Graduation thesis
- Analyzed Internet threats and attacks, IDS system structure and its operation.
- Built a security system on Linux with IDS (snort), firewall (shorewall), web-server (apache), data (mysql), web-based interface (webmin)

## WORK EXPERIENCE

**Research Foundation of the City University of New York, US** 2016-Present  
Research Assistant

- Worked with my advisor in three projects: Bubble cooperative networks, multi-channel speech enhancement and concatenative analysis-by-synthesis.

**Texas Instruments(TI), Vietnam** 2011-2016  
Technical Business Development Engineer

- Managed TI North Vietnam sale and increased revenue by 250% in 2012, 27% in 2013, 69% in 2014, 150% in 2015 and 30% in 2016.
- Conducted bi-weekly review with distributors: Avnet, Arrow, SS, WT and WPI to achieve sale targets.
- Recommended TI solutions and products (integrated circuit) to build electronic devices: smart phone, telecom base station, set top box, smart home devices, car GPS tracking and toy robots.
- Received reward letter from TI Asia President for achievement in 2016

**Viettel Technologies, Vietnam** 2008-2011  
Technical Team Leader

- Led team to build up and propose video conferencing and network solutions to customers.