

# TRUNG THANH TRAN

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[TrungThanhTran](#)

## EDUCATION

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**Politecnico di Torino** | Torino, Italia | Oct 2013 – Oct 2014

The 2<sup>nd</sup> Level Specializing Master on Navigation and Related Applications

**Hanoi University of Science and Technology (HUST)** | Hanoi, VN | Aug 2008 – May 2013

Engineer of Science in Engineering on Information Technology (**Ranked 1/120** - Awarded to the top 10% at HUST)

## RESEARCH EXPERIENCE

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- R&D Laboratory | Pixta Vietnam | 2020
  - Oct 19 – Now: R&D projects – **Sr. AI Researcher**
    - Develop a novel algorithm for automatic annotation based on Transformer with 5% better than SOTA model using Pixta's data.
    - Unsupervised Multi-modal GANs for Human Nationality Exchange - super resolution. The State-of-the-art solution in GANs Image2Image translation problem.
    - Develop a novel algorithm for diversity problem in labeling photos using Multi-modeling, ensemble, transformer technique.
    - Learning2Rank system for ranking outputs of Pixta Image Search Engine using LightGBM, Lambda Ranking.
- Heligate JSC | 2020
  - April 20 – Now: Consultant – AI specialist
    - Support the company in building the first AI team
    - Propose solutions for OCR Document classification for Japan government
    - Build open-domain conversation system using Rasa framework for company business
- Panasonic R&D Center | Hanoi, VN | 2019
  - Feb 19 – Sep 19: Face Recognition – **Technical leader**
    - Arc-Face model with f1-score 95%, and anti-spoofing using 3D images.
  - Jan 16 – Apr 19: Speech/Speaker recognition – **Technical leader**
    - End2End speech recognition powered by DeepSpeech2; Speaker Identification X-vector, LDA & non-voice detection algorithm – robust to noise environment; A Novel DNN model for a trigger robust to noise and light model for smart speakers.
  - Jan 15 – Apr 17: R&D projects – **Engineer**
    - Develop a smart application for factory automation which applied for Panasonic Factory in EU
    - R&D for next generation of automatic: NLP and Speech control for infotainment systems.
- Pi School – School of AI | Rome, Italy | 2018
  - Oct 2018 – Dec 2018: Make the first voice Chabot in energy industrial domain in Italy - **Scholar**
- Istituto Superiore Mario Boella | Tornio, Italia | 2014
- International Centre for R&D on Satellite Navigation Technology in South East Asia | Hanoi, VN | 2010-2013

## WORKING EXPERIENCE

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- Panasonic R&D Center | Hanoi, VN | Apr 2017 – Now
  - Mar 18 – Now Project Smart Speaker for Vietnamese and HR Chabot – **Project Leader**
    - Speaker identification, trigger word, natural language processing from scratch
  - Apr 18 – Jun 19 Project Smart Health Care for Japanese – **Project Leader**
    - Bank-end system: cloud computing, database storage and web service
  - Apr 17 – Apr 18 Project Humanoid TV for Vietnamese market – **Project Leader**
    - Design architecture system, natural language processing

## TEACHING & MENTORING EXPERIENCE

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- [International Francophone Institute](#) | Hanoi, VN | 2019
  - **Guest Lecturer:** Introduction to Artificial Intelligence
- Incubation projects of [Hackathon Vietnam AI Grand Challenge](#) 2019 | Hanoi, Vietnam | Jul 2019 – Now
  - **Mentor** of two projects: Smart Education System | Smart Healthcare System for Young Parents
- Panasonic R&D Center | Hanoi, Vietnam | 2017- 2018
  - **Mentoring** Japanese master students from Kyoto Institute Technology and Ritsumeikan University, Japan
- School of Information and Communication Technology, HUST | Hanoi, Vietnam | 2010
  - **Teaching assistant** at Computer Center about Introduction to Informatics

## PUBLICATION & CONFERENCE PRESENTATIONS

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- Hieu Trong Phung, Anh Tuan Vu, Tung Dinh Nguyen, Lam Thanh Do, Giang Nam Ngo, **Trung Thanh Tran**, Ngoc C. Le, "[MAGNeto: An Efficient Deep Learning Method for the Extractive Tags Summarization Problem](#)"
- Truong, T.A, **Tran, T.T**, Vu, D.L, "*An enhanced X-Vector Model for Noise-Robust, Text-Independent Speaker Identification*". Panasonic Technology Symposium 2018. Paper [here](#).
- Truong, M.D, **Tran, T.T**, Nguyen, D.T, La, T.V, Ta, H.T, "*Receiving and decoding of navigation signal of first satellites of Galileo satellite navigation system in Hanoi*", Journal of Vietnamese science and technology
- Truong, M.D, **Tran, T.T**, Nguyen, D.T, Ta, H.T, "[Recent results in receiving and decoding signals from the Beidou system](#)". International Conference on Localization and GNSS, Torino, Italy, 2013. ISSN -2325 – 0747
- **Tran, T.T**, Romero, R, Dovis, F, "*Monitoring scintillations effects over Vietnam by means of a GNSS software receiver*", Workshop Communications and Navigations for the Development of Vietnam's Marine Economy 2014 (REV/ComNavi-14), Hanoi, Vietnam.

## ACHIEVEMENT AND AWARDS

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- 'VEF 2.0 Program recommended candidate', who passed 2 interview/review rounds with leading Vietnamese academics, most of whom are PhD from top U.S. graduate schools and U.S. professors. [Confirmation Letter](#).
- Scholar at [Pi School](#) - School of Artificial Intelligence Scholarship | Rome, Italy | Oct 2018
- Co-runner up at [Notartel](#) AI\_Hackathon | Rome, Italy | Oct 2018
- The United Nations / Italy Long – term Fellowship Award at Politecnico di Torino | Turin, Italy | 2013 – 2014.
- Summer Scholarship on GNSS, Institute of Positioning, Navigation and Timing of Japan | Tokyo, Japan | 2014
- Runner up at Research Contest in Information and Communication Technology, HUST | Hanoi, VN | 2013
- The 1<sup>st</sup> group in Asia announced First Galileo – Only Positioning on Inside GNSS and GPS World | Apr 2013
- Successful development of Beidou receiver, one of the first in the world for the Beidou Navigation Satellite System

## SKILLS

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- *Programming:* C/C++, Java, Nodejs, HTML, Python, Tensorflow, Pytorch, SK-learn, Pandas
- *AI:* Linear Algebra, Statistic, Natural Language Processing, Deep Learning, Voice recognition, Computer Vision, GANs
- *Cloud computing:* AWS EC2, AWS RDS, AWS Polly, Google Speech Cloud Service, Dialogflow.ai, Microsoft Azure
- *Graphic Design:* brochure, newsletter, event backdrop, advertising.
- *GitHub:* [TranTony](#)
- *My medium:* <https://medium.com/@silkworm>

## REFERENCES

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- **Dr. Sébastien Bratières** - Director of AI, School of AI, Translated, Pi Campus, Rome, Italy.  
Member of Machine Learning group at Cambridge University Engineering Department  
Email: [sebastien@picampus-school.com](mailto:sebastien@picampus-school.com)
- **Dr. Usman Qayyum** - Founder DeepNeuralNet Solutions / Senior Researcher at Center of Excellence, Pakistan  
Email: [mrusmanqayyum@gmail.com](mailto:mrusmanqayyum@gmail.com)
- **Dr. Tung Hai Ta** - Dean of School of Information & Communication Technology, HUST  
Email: [tungth@soict.hust.edu.vn](mailto:tungth@soict.hust.edu.vn)