

# Minh-Tien Nguyen

## Curriculum Vitae

### Personal Information

1. Name **NGUYEN, Tien Minh (Minh-Tien Nguyen).**
2. Nationality **Vietnamese.**
3. Date of birth **July 1986.**
4. Contact address Faculty of Information Technology, Pho Noi campus, Hung Yen University of Technology and Education, Nhan Hoa, Pho Noi, Hung Yen, Vietnam.
- Position Associate Professor, Ph.D., Lecturer.
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### Education Background

- June 2009 **Hung Yen University of Technology and Education (UTEHY) (B.S)**, HUNG YEN, VIET-NAM, Graduation, June 2009.
- January 2013 **National Institute of Informatics (NII)**, TOKYO, JAPAN, Certificate, January 202014.
- October 2014 **University of Engineering and Technology (UET) (M.Sc.), Vietnam National University, Hanoi (VNUH)**, HANOI, VIETNAM, Graduation, October 2014.
- March 2018 **Japan Advanced Institute of Science and Technology (JAIST) (Ph.D.)**, JAPAN, Graduation, March 2018.

### Occupation

- Jun 2009 – **Software Engineer**, BKAV COPORATION, Hanoi, Vietnam.  
Oct 2009 Developing a portal system for E-government.
- Oct 2009 – **Assistant Lecturer**, SOFTWARE ENGINEERING DEPARTMENT, FACULTY OF INFORMATION TECHNOLOGY, HUNG YEN UNIVERSITY OF TECHNOLOGY AND EDUCATION, Hung Yen, Vietnam.  
Mar 2014 Teaching fundamental classes for undergraduate students.  
Guiding students to doing projects.
- Apr 2018 – **Ph.D., Lecturer**, SOFTWARE ENGINEERING DEPARTMENT, FACULTY OF INFORMATION TECHNOLOGY, HUNG YEN UNIVERSITY OF TECHNOLOGY AND EDUCATION, Hung Yen, Vietnam.  
Nov 2022 Teaching fundamental and advanced classes for undergraduate and graduate students.  
Guiding students to doing projects.  
Leading a research team for studying natural language processing (NLP).
- Dec 2022 – **Associate Professor, Ph.D., Lecturer**, COMPUTER SCIENCE DEPARTMENT, FACULTY OF INFORMATION TECHNOLOGY, HUNG YEN UNIVERSITY OF TECHNOLOGY AND EDUCATION, Hung Yen, Vietnam.  
Teaching fundamental and advanced classes for undergraduate and graduate students.  
Guiding students to doing projects.  
Leading a research team for studying natural language processing (NLP).

Apr 2018 –	<b>Senior AI Researcher</b> , AI ACADEMY VIETNAM, Hanoi, Vietnam.
Aug 2020	Leading a research team to build a news analytic system for seafood enterprises. Leading a team to build a virtual assistant system for a big seafood company. Teaching basic machine learning and NLP courses.
Oct 2018 –	<b>Senior AI Researcher</b> , CINNAMON AI, Hanoi, Vietnam.
Nov 2024	Leading an NLP research team to handle many NLP projects in Japanese.

## Specialized Fields

Main outcomes The main outcome of my research is to apply techniques of Natural Language Processing and Machine Learning to address the challenge of real problems and build intelligent systems that can help people to be happy with AI. My major specialized fields are listed as the following:

### Natural Language Processing

- Text/Document analysis: text summarization, text understanding, textual entailment and alignment, sentiment analysis, question answering.
- Information extraction: named entity recognition, span extraction, event extraction.
- Word and sentence segmentation, parsing, language models.
- Retrieved Augmented Generation (RAG) and large language models.
- Apply NLP techniques to cognition-aware AI and legal (Legal AI).

### Machine Learning

- Supervised learning:  $k$ -nearest neighbors (KNN), Naive Bayes (NB), decision tree, support vector machines (SVM), ensemble learning, etc.
- Unsupervised learning:  $k$ -means, singular value decomposition, matrix factorization, etc.

### Deep Learning

- Neural Networks: CNN, RNN, LSTM, BiLSTM, GRU, etc.
- Transformers and pre-train models: BERT, ELECTRA, BART, T5, GPT, etc.

## Projects and Experiences

SmartChat	Building the an intelligent bot that uses GPT and RAG for answering questions from business documents. I joint the project as the technical leader.
Chatbot for EVNNPT (PTC1)	Building the chatbot for frequent question and answers for EVNNPT (PTC1). The chatbot focuses on internal domains of PTC1. I joint the project as the leader who gave solutions for building the chatbot.
MeeyLand chatbot	Building the chatbot MeeyLand. I took the role of leader for building the chatbot of MeeyLand. The first stage of the chatbot is to answer questions of news package.
UTEHY chatbot	Building the chatbot for answering frequent questions of enrolment. I joint the project as a leader who works with students for building the chatbot.

## Teaching

UTEHY	Object-oriented Programming, Software Engineering, Basic Machine Learning, Deep Learning, Natural Language Processing.
AI Academy	Basic Machine Learning, Deep Learning, and Natural Language Processing (2019, 2019, 2020) <ul style="list-style-type: none"> <li>○ The objective of these project-based courses is to provide fundamental knowledge and practice for both IT and non-IT learners who can work with practical AI projects. <a href="#">The NLP Syllabus</a>.</li> </ul>
EVNNPT (PTC1)	Machine Learning and Data Analysis <ul style="list-style-type: none"> <li>○ The objective of these courses is to provide fundamental knowledge and practice of machine learning and data analysis for EVNNPT (PTC1) members.</li> </ul>

- EVN Deep Learning
  - The objective of this course is to provide fundamental knowledge and practice of deep learning for EVN members.
- BAV Natural Language Processing and Chatbot
  - The objective of these courses is to provide fundamental knowledge and practice of natural language processing for building chatbots applied the banking domain at Banking Academy of Vietnam.
- Vin BigData Basic Machine Learning, Deep Learning, and Natural Language Processing (2020, 2021)
  - The objective of these courses is to provide fundamental knowledge and practice of the three courses for AI candidates of Vin BigData. The courses are project-based courses. [The NLP Syllabus](#).

## Student Coaching

- Master Medical record classification, document classification/ summarization, question generation.
- Ph.D. Text generation and multimodal named entity recognition.
- students
- Project Building a question-answer generation system to support teaching and learning (UTEHY).

## Professional Memberships/Affiliations and Research Activities in a Community

- **Organizers** of Special Session on Deep Learning for Language Processing at International Conference on Knowledge and Systems Engineering (KSE 2018, 2019, 2020) and ICCCI (2020).
- **Reviewer** Knowledge-based Systems; Engineering Applications of Artificial Intelligence; Data & Knowledge Engineering; PLOS ONE; Applied Intelligence; Applied Artificial Intelligence; Knowledge and Information Systems; Artificial Intelligence in Medicine; Computer Science Review; Artificial Intelligence Review; Electronic Commerce Research and Applications.
- **Reviewer** ACL ARR, AAAI, ECAI, CIKM, PACLIC, PACLING, ICCCI, KSE, SoICT, FDSE.

## Awards

- ECIR, CIKM Student travel grant, 2016.
- ECML/PKDD The second best system ECML/PKDD Challenge on QA ranking 2016.
- SoICT Best paper award, SoICT 2017.
- JAIST Outstanding graduated student, JAIST 2018.
- ICDAR-DIL Best paper award, DIL workshop, ICDAR 2021.

## Funding

- UTEHY UTEHY.L.2019.53; key projects: UTEHY.L.2020.04, UTEHY.L.2021.08, UTEHY.L.2022.02.
- MoET A Study of Automatic Question generation, B2024-SKH-01.
- Nafosted Enhancing Empathy in Large Language Models for Mental Health Support, 2026-2028.

## Publication

Selected articles and conference papers. For more detailed information, please visit:

- [Google scholar](#)
- [My personal website](#).

### Selected articles

- Nhu Hai Phung, Chi Thanh Nguyen, Minh-Tien Nguyen, Thu Ha Nguyen, Huu-Loi Le, Truong Phuc Nguyen. *A Fine-tuning Framework based on Questions, Context, and Answer Relationships for Enhancing Legal Information Retrieval*, Engineering Applications of Artificial Intelligence (EAAI), 159 (2025), 111570, 2025 (SCIE, Q1, IF: 8.0).
- Pham Quoc-Hung, Minh-Tien Nguyen, Shumpei Inoue, Manh Tran-Tien, Xuan-Hieu Phan. *Learning to Generate Text with Auxiliary Tasks*, Knowledge-based Systems, vol. 304, 112570, 2024 (SCIE, Q1, IF: 7.6).
- Pham Quoc-Hung, Huu-Loi Le, Dang Nhat Minh, Khang T. Tran, Manh Tran-Tien, Viet-Hung Dang, Huy-The Vu, Minh-Tien Nguyen, and Xuan-Hieu Phan. *Towards Vietnamese Question and Answer Generation: An Empirical Study*, ACM Transactions on Asian and Low-Resource Language Information Processing, 2024 (SCIE, Q2, IF: 2.0).
- Bui Duc Tho, Minh-Tien Nguyen, Dung Tien Le, Linh-Lung Ying, Shumpei Inoue, Tri-Thanh Nguyen. *Improving Biomedical Named Entity Recognition with Additional Contexts*, Journal of Biomedical Informatics, Vol. 156, 104674, 2024 (SCIE, Q1, IF: 4.5).
- Minh-Tien Nguyen, Nguyen Hong Son, and Linh Thai Le. *Gain More with Less: Extracting Information from Business Documents with Small Data*, Expert Systems with Applications, 119274, 2023 (SCIE, Q1, IF: 7.5).
- Huy-The Vu, Minh-Tien Nguyen, Van-Chien Nguyen, Minh-Hieu Pham, Van-Quyet Nguyen, Van-Hau Nguyen. *Label Representative Graph Convolutional Network for Multi-Label Text Classification*, Applied Intelligence, 2022 (SCIE, Q2, 3.5).
- Minh-Tien Nguyen, Dung Tien Le, Linh Le. *Transformers-based information extraction with limited data for domain-specific business documents*. Engineering Applications of Artificial Intelligence, Vol. 97, 104100, 2021 (SCIE, Q1, IF: 8.0).
- Minh-Tien Nguyen, Viet Cuong Tran, Xuan Hoai Nguyen, and Le-Minh Nguyen. *Web Document Summarization by Exploiting Social Context with Matrix Co-factorization*. Information Processing & Management (IPM), 56(3), pp. 495-515, 2019 (SCIE, Q1, IF: 6.9).
- Minh-Tien Nguyen, Duc-Vu Tran, Minh-Le Nguyen, and Xuan-Hieu Phan. *Exploiting User Posts for Web Document Summarization*. ACM Transactions on Knowledge Discovery from Data (TKDD) 12(4), 49, 2018 (SCIE, Q1, IF: 4.5).
- Minh-Tien Nguyen, Duc-Vu Tran, and Minh-Le Nguyen. *Social Context Summarization using User-generated Content and Third-party Sources*. Knowledge-Based Systems (KNOSYS), 144(2018), pp. 51-64, 2017 (SCIE, Q1, IF: 7.6).
- Minh-Tien Nguyen and Minh-Le Nguyen. *Intra-relation or Inter-relation?: Exploiting Social Information for Web Document Summarization*. Expert Systems with Applications (ESWA), 76, pp. 71-84, 2017 (SCIE, Q1, IF: 7.5).

### **Selected conference papers**

- Hajime Hotta, Huu-Loi Le, Manh-Cuong Phan, Minh-Tien Nguyen. *Metamo: Empowering Large Language Models with Psychological Distortion Detection for Cognition-aware Coachin*, In Proceedings of the 2025 Conference on Empirical Methods in Natural Language Processing (EMNLP): System Demonstrations, pp. 862-872. 2025 (rank A\*).
- Chening Yang, Duy-Khanh Vu, Minh-Tien Nguyen, Xuan-Quang Nguyen, Linh Nguyen, Hung Le. *SuperRAG: Beyond RAG with Layout-aware Graph Modeling*, In Proceedings of the 2025 Conference of the Nations of the Americas Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL, Volume 3: Industry Track), pp. 544-557. 2025 (rank A).
- Viet-Tung Do, Xuan-Quang Nguyen, Van-Khanh Hoang, Duy-Hung Nguyen, Shahab Sabahi, Chening Yang, Hajime Hotta, Minh-Tien Nguyen, Hung Le. *Automatic Prompt Selection for Large Language Models*, Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD), pp. 91-102, 2025 (rank A).

- Minh-Tien Nguyen, Tuan-Hai Luu, Xuan-Quang Nguyen, Tung-Duong Nguyen, Jeff Yang. *Improving Speech Recognition with Jargon Injection*, 25th Interest Group on Discourse and Dialogue (SIGDIAL), 2024 (rank B).
- Shumpei Inoue, Minh-Tien Nguyen, Hiroki Mizokuchi, Tuan-Anh D. Nguyen, Huu-Hiep Nguyen, Dung Le. *Towards Safer Operations: An Expert-involved Dataset of High-Pressure Gas Incidents for Preventing Future Failures*, In Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing (EMNLP): Industry Track, pp. 509-521, 2023 (rank A\*).
- Shumpei Inoue, Tsungwei Liu, Nguyen Hong Son, Minh-Tien Nguyen. *Enhance Incomplete Utterance Restoration by Joint Learning Token Extraction and Text Generation*. 2022 Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL), pp. 3149-3158, 2022 (rank A).
- Duy-Hung Nguyen, Nguyen Viet Dung Nghiem, Bao-Sinh Nguyen, Dung Tien Le, Shahab Sabahi, Minh-Tien Nguyen, Hung Le. *Make The Most of Prior Data: A Solution for Interactive Text Summarization with Preference Feedback*. 2022 Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL): Findings, pp. 1919-1930, 2022 (rank A).
- Minh-Tien Nguyen, Dung Tien Le, Le Thai Linh, Nguyen Hong Son, Do Hoang Thai Duong, Bui Cong Minh, Nguyen Hai Phong, and Nguyen Huu Hiep. *AURORA: An Information Extraction System of Domain-specific Business Documents with Limited Data*. Proceedings of the 29th ACM International Conference on Information and Knowledge Management (CIKM), pp. 3437-3440, pp. 19-23, 2020 (rank A).
- Minh-Tien Nguyen, Chien-Xuan Tran, Duc-Vu Tran, and Minh-Le Nguyen. *SoLSCSum: A Linked Sentence-Comment Dataset for Social Context Summarization*. 25th ACM International Conference on Information and Knowledge Management (CIKM), pp. 2409-2412, 2016 (rank A).
- Minh-Tien Nguyen and Minh-Le Nguyen. *SoRTESum: A Social Context Framework for Single-Document Summarization*. 38th European Conference on Information Retrieval (ECIR), pp. 3-14, 2016 (rank A).
- Minh-Tien Nguyen, Asanobu Kitamoto and Tri-Thanh Nguyen. *TSum4act: A Framework for Retrieving and Summarizing Actionable Tweets during a Disaster for Reaction* 19th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD), pp. 64-75, 2015 (rank A).