Trung-Hoang Le

Research Fellow@NTU | thle.2017@smu.edu.sg | lthoang.com

About Me

Xin chào! I am a Lecturer at Faculty of Information Technology, University of Science, VNU-HCM, under the prestigious VNU350 Project. Previously I was a Research Fellow at Air Traffic Management Research Institute, Nanyang Technological University (NTU). Before that, I was a Research Scientist at Preferred.AI. I completed my PhD at SMU School of Computing and Information Systems, supervised by Prof. Hady W. Lauw. My thesis is on Recommendation Explanation, providing rationale for given recommendations.

Earlier in my career, I was a Software Engineer at KMS Technology. I completed my bachelor's degree at VNU-HCM University of Science, during which I had a stint as Research Assistant at VNU-HCM John von Neumann Institute. I am grateful for the following supportive scholarships that helped me afford my study: SMU Full Scholarships, SMU Presidential Doctoral Fellowship, 2020 SDSC Dissertation Research Fellowship. My first paper won a Distinguished Paper Award at IJCAI'20.

Education

- **SMU School of Computing and Information Systems** — Singapore
  PhD in Computer Science — Jan 2018 – Dec 2022

- **VNU-HCM University of Science** — Ho Chi Minh City, Viet Nam
  B.S., Advanced Program in Computer Science — Oct 2011 – Nov 2015

Awards

- **Dean's List Award - SMU SCIS (2021)** in recorgnition of significant research achievements
- **SMU Presidential Doctoral Fellowship in AY2020/2021 and AY2021/2022**
- **SDSC Dissertation Research Fellowship 2020**
- **Distinguished Paper Award at IJCAI'20** for paper "Synthesizing Aspect-Driven Recommendation Explanations from Reviews"
- **SMU Full Scholarship (4 years), PhD in Computer Science**

Research Topics

Web mining, recommender systems, trustworthy artificial intelligence, and air traffic management.

Publication

- **Compositions of Variant Experts for Integrating Short-Term and Long-Term Preferences.** Jaime Hieu Do, Trung-Hoang Le, Hady W. Lauw. *ACM Transactions of Recommender Systems (TORS).* **(Revise and Resubmit)**
- **Selecting Comparative Sets of Reviews Across Multiple Items.** Trung-Hoang Le and Hady W. Lauw. *International Conference on Extending Database Technology (EDBT'25), Mar 2025.*
- **Learning to Rank Aspects and Opinions for Comparative Explanations.** Trung-Hoang Le and Hady W. Lauw. *Machine Learning, vol. 114, no. 17, Jan 2025. Presented at ACML 2024.*
- **Question-Attentive Review-Level for Neural Rating Regression.** Trung-Hoang Le and Hady W. Lauw. *ACM Transactions on Intelligent Systems and Technology (TIST), vol. 15, no. 6, pp. 132:1 - 132:25, Dec 2024.*
- **Hypergraphs with Attention on Reviews for Explainable Recommendation.** Theis E. Jendal, Trung-Hoang Le, Hady W. Lauw, Matteo Lissandrini, Peter Dolog and Katja Hose. *European Conference on Information Retrieval (ECIR'24), Mar 2024.*
- **Multi-Modal Recommender Systems: Towards Addressing Sparsity, Comparability, and Explainability.** Trung-Hoang Le, Quoc-Tuan Truong, Aghiles Salah, and Hady W. Lauw. *Tutorial at ACM Web Conference (TheWebConf'23 or WWW'23), Apr 2023.*
- **Question-Attentive Review-Level Recommendation Explanation.** Trung-Hoang Le and Hady W. Lauw. *2022 IEEE international conference on Big Data (Big Data), Dec 2022.*
- **Explainable Recommendation with Comparative Constraints on Product Aspects.** Trung-Hoang Le and Hady W. Lauw. *ACM International Conference on Web Search and Data Mining (**WSDM'21**), Mar 2021.*
- **Synthesizing Aspect-Driven Recommendation Explanations from Reviews.** Trung-Hoang Le and Hady W. Lauw. *International Joint Conference on Artificial Intelligence (**IJCAI'20**), Jan 2021.* **Distinguished Paper Award**

SERVICE

- **Program Committee:** TheWebConf'24, KDD'24, KDD'25, TheWebConf'25, ACML'25, DSAA'25

- **Journal Reviewer:** Machine Learning

EXPERIENCE

- **University of Science, VNU-HCM — Lecturer**   Ho Chi Minh City, Viet Nam
  Faculty of Information of Technology   *Sep 2025 – Present*

- **Air Traffic Management Research Institute at NTU — Research Fellow**   Singapore
  Technical Lead of the AI-Assisted Regional ATFM Project   *Sep 2024 – Aug 2025*

- **Preferred.AI lab at SMU SCIS — Research Scientist**   Singapore
  Trustworthy Recommender Systems   *Mar 2023 – Aug 2024*

- **KMS Technology — Software Engineer**   Ho Chi Minh City, Viet Nam
  Maintaining a Master Data Management System for a US-based client   *Feb 2016 – Nov 2017*

- **John von Neumann Institute — Research Assistant**   Ho Chi Minh City, Viet Nam
  Project: predict traffic congestion status in Ho Chi Minh City.   *Jun 2014 – Aug 2014*
  Collecting GPS data from volunteers and crawling traffic data from a governmental website (https://vovgiaothong.vn).

TEACHING

- **CM102 Critical Thinking (Fall 2024, Spring 2025) — Teaching Associate/Assistant**
  Faculty of Information Technology, University of Science, VNU-HCM, Ho Chi Minh City, Viet Nam

- **COR-IS1702 Computational Thinking (Fall 2019, Spring 2022, Fall 2022) — Teaching Assistant**
  SMU School of Computing and Information Systems, Singapore

- **CS608 Recommender Systems (Summer 2021, Summer 2022) — Teaching Assistant**
  Master of IT in Business (MITB), SMU School of Computing and Information Systems, Singapore

- **CS201 Data Structures and Algorithms (Fall 2020) — Teaching Assistant**
  SMU School of Computing and Information Systems, Singapore

PROJECTS

- **AI-Assisted Regional Air Traffic Flow Management — Technical Lead**
  A next generation ATFM system for ASEAN region and beyond

- **Cornac – https://cornac.preferred.ai — Contributor**
  An open-source library of recommendation algorithms, one of recommended evaluation frameworks at RecSys2023

- **Butler – https://butler.preferred.ai — Mentor**
  An interactive chatbot that can provide recommendation and explanation.

- **Medigo – https://www.medigo.xyz — Developer**
  A Medicine Ordering System in Vietnam.
  I developed backend services to collect feedback from users and analysed results to get insights for future development.

- **4eaz – https://4eaz.com — Founder**
  A web application manages small retail and service business.

OTHER ACTIVITIES

- **Karatedo:** A Karate Do enthusiast with 2nd Dan Black Belt Shotokan Karate