

Nam Khanh Tran

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Education

- 2013–2018 **Ph.D. in Computer Science**, L3S Research Center, Leibniz Universität Hannover, Germany.
Thesis: *Representation and Contextualization for Document Understanding*
Advisor: Prof. Dr. techn. Wolfgang Nejdl
- 2010–2012 **M.Sc. in Language and Communication Technology (LCT)**.
M.Sc. in Computational Linguistics, Saarland University, Germany (GPA: 1.2/1.0)
M.Sc. in Cognitive Science, University of Trento, Italy (GPA: 110/110)
Thesis: *Multimodal Fusion for Combining Textual and Visual Information in a Semantic Model*
Advisors: Prof. Manfred Pinkal and Dr. Marco Baroni
- 2005–2009 **B.S. in Computer Science**, VNU University of Engineering and Technology, Vietnam.
GPA: 9.17/10 (Rank #1)
Thesis: *Some studies of a probabilistic framework for finding object-oriented information in unstructured data*
Advisor: Assoc. Prof. Quang Thuy Ha

Experiences

- Sept 2018 – Present **Applied Scientist**, Amazon Development Center Germany GmbH, Berlin, Germany.
- Use data-driven methods to automatically optimize the availability and efficiency of consumer services.
- Oct 2012 – Aug 2018 **Research Engineer**, L3S Research Center, Leibniz Universität Hannover, Germany.
- BMBF project [eLabour](#): Proposed and implemented Multihop Attention Networks for question answer matching. Developed an exploratory search system using ElasticSearch and AngularJS.
 - EU project [ForgetIT](#): Developed ranking algorithms to retrieve additional context for supporting the interpretations of documents. Implemented several topic modeling approaches for the problem of context evolution.
 - BMBF project [Gute Arbeit](#): Proposed and implemented a framework for managing, searching and analyzing qualitative data gathered within diverse sociological studies.
- May 2017 – Aug 2017 **Research Intern**, Amazon Core Machine Learning, Berlin, Germany.
- Amazon NLP Team: Developed deep learning based models to exploit syntactic and semantic information from text in tree-structured Long Short-Term Memory (LSTM) networks.
- Nov 2011 – Aug 2012 **Research Assistant**, CLIC-CIMEC Research Laboratory, University of Trento, Italy.
- Google Award Research project “Semantic spaces from text and images”: Proposed and implemented an algorithm for combining textual and visual features in a semantic model.
- Aug 2011 – Nov 2011 **Research Intern**, Human Language Technology, Fondazione Bruno Kessler, Italy.
- FBK project “Automatic learning and recognizing patterns which link the word sense to the word usage”: Implemented the Angluin Algorithm for learning corpus patterns using finite state automata.

- Nov 2010 – **Research Assistant**, German Research Center for Artificial Intelligence, Germany.
Jun 2011
 - T4MeNet project: Built a crawling control system to crawl and manage up-to-date data from Official Document System of United Nations and implemented a MT Server Land worker server that connects to the Joshue Machine Translation framework.
- Mar 2010 – **Part-time Software Developer**, WorldTech Company, Hanoi, Vietnam.
Aug 2010
 - Developed methods for predicting the cash flow of small and medium companies based on their historical transactional data and performance measures.
- Jul 2008 – **Research Assistant**, *Data Science and Knowledge Technology Laboratory*, VNU University of Engineering and Technology, Vietnam.
Aug 2010
 - VNU project “VNU QG.10.38: Research to develop a model and solution for building Vietnamese entities search engine”

Honors & Awards

- 2016 **Top 5 Winners at CIKM Cup 2016.**
- 2010–2012 **European Masters Program in Language and Communication Technologies (EM-LCT) Scholarship.**
- 2009 **The Honda Young Engineer and Scientist Award (Honda Y-E-S)**, by Honda Foundation and The National Institute for Science and Technology.
- 2009 **Distinguished Hanoi Valedictorian Award.**
- 2009 **Distinguished Academic Achievement Award.**
- 2005–2009 **Typical Young Figures**, Vietnam National University, Hanoi.
- 2007 **Cisco CCNA Scholarship.**
- 2006 **Third Prize, ACM/ICPC Asia Hanoi Regional Contest.**
- 2004 **Third Prize, National Student Programming Contest.**

Technical Skills

Python, Java, JavaScript, C/C++, MySQL, MongoDB, Hadoop (HDFS, MapReduce)
scikit-learn, PyTorch, MXNet

Publications

- Nam Khanh Tran, Claudia Niederée. *Multihop Attention Networks for Question Answer Matching*. The 41st International ACM SIGIR Conference on Research and Development in Information Retrieval, SIGIR, 2018.
- Nam Khanh Tran, Weiwei Cheng. *Multiplicative Tree-Structured Long Short-Term Memory Networks for Semantic Representations*. The Seventh Joint Conference on Lexical and Computational Semantics, *SEM, 2018.
- Nam Khanh Tran, Claudia Niederée. *A Neural Network-based Framework for Non-factoid Question Answering*. Proceedings of the The Web Conference, WWW 2018 (Companion).
- Dat Ba Nguyen, Abdalghani Abujabal, Nam Khanh Tran, Martin Theobald, Gerhard Weikum. *Query-Driven On-The-Fly Knowledge Base Construction*. Proceedings of the Very Large Data Bases (PVLDB), 2017.
- Nam Khanh Tran, Tuan Tran, Claudia Niederée. *Beyond Time: Dynamic Context-Aware Entity Recommendation*. The Semantic Web - 14th International Conference (ESWC), 2017. (Nomination for best paper award).
- Nattiya Kanhabua, Philipp Kemkes, Wolfgang Nejdl, Tu Ngoc Nguyen, Felipe Reis, Nam Khanh Tran. *How to Search the Internet Archive Without Indexing It*. Proceeding of the 20th International Conference on Theory and Practice of Digital Libraries (TPDL), 2016.
- Tuan Tran, Nam Khanh Tran, Asmelash Teka Hadgu and Robert Jäschke. *Semantic Annotation for Microblog Topics Using Wikipedia Temporal Information*. The Conference on Empirical Methods in Natural Language Processing (EMNLP), 2015.
- Nam Khanh Tran, Andrea Ceroni, Nattiya Kanhabua and Claudia Niederée. *Time-travel Translator: Automatically Contextualizing News Articles*. Proceedings of the 24th International Conference on World Wide Web Companion (WWW), 2015.
- Nam Khanh Tran, Andrea Ceroni, Nattiya Kanhabua and Claudia Niederée. *Back to the past: Supporting interpretations of forgotten stories by time-aware re-contextualization*. Proceedings of the Eighth ACM International Conference on Web Search and Data Mining (WSDM), 2015.
- Andrea Ceroni, Nam Khanh Tran, Nattiya Kanhabua, Claudia Niederée, *Bridging Temporal Context Gaps using Time-Aware Re-Contextualization*. Proceedings of the Special Interest Group on Information Retrieval (SIGIR), 2014.
- Elia Bruni, Nam Khanh Tran and Marco Baroni, *Multimodal Distributional Semantics*. Journal Artificial Intelligent (JAIR), 2014 (2017 IJCAI-JAIR best paper prize).
- Nam Khanh Tran, *Time-aware Topic-based Contextualization*. The 23rd International World Wide Web Conference (Companion Volume), 2014.
- Bischoff, Kerstin; Niederée, Claudia; Tran, Nam Khanh; Zerr, Sergej; Birke, Peter; Brückweh, Kerstin; Wiede, Wiebke, *Exploring Qualitative Data for Secondary Analysis: Challenges, Methods, and Technologies*. The Digital Humanities conference (poster), 2014.
- Nam Khanh Tran, Sergej Zerr, Kerstin Bischoff, Claudia Niederée, Ralf Krestel, *Topic cropping: Leveraging latent topics for the analysis of small corpora*. Proceedings of the Theory and Practice of Digital Libraries (TPDL) , 2013.

- Giang Binh Tran, Tuan Tran, [Nam Khanh Tran](#), Mohammad Alrifai, Nattiya Kanhabua, *Leveraging Learning To Rank in an Optimization Framework for Timeline Summarization*, Workshop of Time-aware Information Access (TAIA), the 36th Conference of Special Interest Group in Information Retrieval, SIGIR 2013.
- [Nam Khanh Tran](#), Sergej Zerr, Kerstin Bischoff, Claudia Niederée and Ralf Krestel, “*Gute Arbeit*”: *Topic Exploration and Analysis Challenges for the Corpora of German Qualitative Studies*. Exploration, Navigation and Retrieval of Information in Cultural Heritage (ENRICH) Workshop, SIGIR 2013.
- Sergej Zerr, [Nam Khanh Tran](#), Kerstin Bischoff, and Claudia Niederée, *Sentiment Analysis and Opinion Mining in Collections of Qualitative Data*. The 10th International Conference on Preservation of Digital Object (iPRES), 2013.
- Elia Bruni, Gemma Boleda, Marco Baroni, [Nam Khanh Tran](#), *Distributional semantics in technicolor*. Proceedings of the Association for Computational Linguistics (ACL), 2012.
- [Nam-Khanh Tran](#), Kim-Cuong Pham, Quang-Thuy Ha, *XPath-wrapper induction for data extraction*. 2010 International Conference on Asian Language Processing (IALP), 2010.