

Ngan Dong

Curriculum Vitae

PERSONAL DETAILS

<i>Birth</i>	July 24, 1988
<i>Address</i>	Knoevenagelweg 3, 30165, Hannover, Germany
<i>Phone</i>	+(49) 152-107-23190
<i>Mail</i>	dong@l3s.de
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<i>G. Scholar</i>	https://scholar.google.com/citations?user=M4zb0csAAAAJ

EDUCATION

PhD Computer Science <i>Leibniz University Hannover</i> Research Topic: "Deep learning for precision medicine"	2019 - 2022
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MSc. Computer Science <i>Washington State University</i> Thesis: "Natural Language Generation from Graphs"	2011-2013
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BSc. in Computer Science, Honor program <i>VNU University of Engineering and Technology</i>	2006-2010
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RESEARCH INTEREST

Current: Bio-informatics, Graph Representation Learning, Feature Selection, Multi-task Learning, Data Integration

Past: Natural language processing, Named Entity recognition, Semantic Analysis, Recommendation systems

WORK EXPERIENCE

Research Assistant <i>Leibniz University Hannover, Full-time</i> <ul style="list-style-type: none">- Working on the PRESENT project¹ which aims at integrating clinical, biological, and big data research to advance our understanding of norovirus gastroenteritis.- Developed state-of-the-art models for various bioinformatic problem which focus on multiple data sources integration, network analysis, multitask learning, graph representation learning, and feature selection.- Developed a cochlear implant outcome prediction model from real patient data. The work involved heavy data preprocessing tasks, feature extraction, feature selection, and model development.- Perform some others data retrieval, data pre-processing tasks and specialized analysis on the results retrieved from wet-lab experiments given by our biologist partners.	2019-Present
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¹<http://www.translationsallianz.de/train-platforms/train-projects/present/?L=1>

Research Engineer(Machine Learning)

2014-2019

FPT Technology Research Institute, Full-time

- Being one of the first ML researchers working on Natural Language Understanding module for FPT.AI² - one of the first and largest comprehensive AI platforms in Vietnam.
- Worked on (i) Recommendation systems for e-commerce websites and online news, (ii) Sentiment classification for electronic retailer, (iii) User segmentation, and (iv) online-news topic modeling

Software Developer

2013-2014

Citigo Joint stock Company., Full-time

Work as a full-stack developer on out-sourcing projects for an Australian customers. Responsible for maintaining the existing systems, developing, testing and deploying new functionality on customers' production servers.

Research Assistant

2011-2013

Artificial Intelligence laboratory, WSU

- Develop GNLG - a Natural Language Generation (NLG) system for Resource Description Framework (RDF) Graphs.
- Build ontology models for cooking recipes and data from a defense-related project about people in a military- controlled area

Research Assistant

2009-2010

Computer Science Department, VNU University of Engineering and Technology

- Research on POS taggers for Vietnamese using Conditional Random Fields and Hidden Markov Models.
- Develop a Vietnamese collocation extractor using different statistical methods

SKILLS

<i>Languages</i>	Vietnamese (mother tongue) English (fluent) German (a little bit, enough for my daily life)
<i>Programming languages</i>	Python(since 2018), Java(till 2018), Latex, familiar with some others

PUBLICATIONS

Ngan Dong, Stefanie Mücke, Megha Khosla, “*MuCoMiD: A Multitask graph Convolutional Learning Framework for miRNA-Disease Association Prediction*”, submitted to IEEE/ACM TCBB, 2021.

Ngan Dong, Graham Brogden, Gisa Gerold, Megha Khosla, “*A multitask transfer learning framework for the prediction of virus-human protein-protein interactions*”, BMC Bioinformatics, 2021.

Ngan Dong, Megha Khosla, “*A Multitask Convolutional Learning Framework for miRNA-Disease Association Prediction*”, BIOKDD 2021.

Ngan Dong, Megha Khosla, “*A multitask transfer learning framework for Novel virus-human protein interactions*”, ICLR Workshop on AI for Public Health, 2021.

Ngan Dong, Megha Khosla, “*Towards a consistent evaluation of miRNA-disease association prediction models.*”, 2020 IEEE International Conference on Bioinformatics and Biomedicine (BIBM). IEEE, 2020.

Ngan Dong, Megha Khosla. “*Revisiting Feature Selection with Data Complexity for Biomedicine.*” 2020 IEEE 20th International Conference on Bioinformatics and Bioengineering (BIBE).

²<https://fpt.ai/>

Kim Anh Nguyen, **Ngan Dong**, Cam Tu Nguyen “*Attentive Neural Network for Named Entity Recognition in Vietnamese*”, 2019 IEEE-RIVF International Conference on Computing and Communication Technologies (RIVF). IEEE, 2019.

Ngan Dong, Larry Holder, “*Natural Language Generation from Graphs*”, International Journal of Semantic Computing. Vol. 8, No. 3, pp. 335-384, 2014

ACADEMIC SERVICES

Teaching assistant for Machine Learning for Graphs course (2021)

Seminar supervisor for Artificial Intelligence course (2021)

Msc. students supervised/co-supervised

Johanna Schrader - Thesis title: Application of Graph Structure Learning in Biological Data Analysis (2021)

Luo Yi - Thesis title: At the Interface between Biomedical Research and Software engineering (2021)

HONOR AND AWARDS

August 2011 – May 2013: Vietnam Education Foundation (VEF) scholarship

July 2010: Scholarship for Digital Signal Processing Academy Summer School

Dec 2009: Outstanding female student in Information Technology

Scholarship from the Ministry of Information and Communication, Vietnam

Oct 2007: VNU University of Engineering and Technology Outstanding student

REFERENCES

Available upon request.