THAI BINH NGUYEN

Email: nguyenthaibinh@gmail.com
Homepage: http://binhnguyen.me
Github: http://github.com/nguyenthaibinh

EDUCATION

Ph.D., Informatics Apr 2016 - Mar 2019
SOKENDAI (The Graduate University for Advanced Studies) Japan
Dissertation: Embedding Models for Recommender Systems on Sparse Data.

M.Sc., Computer Science Apr 2006 - Mar 2008
Japan Advanced Institute of Science and Technology Japan
Thesis: Matching Complex Documents: An Application to the CISCO Network Error Database.

B.A., Computer Science Sep 1998 - Jun 2003
Hanoi University of Science and Technology Vietnam
Thesis: Feature Extraction for the Fingerprint Recognition.
GPA: 8.54/10.

HONORS AND AWARDS

Excellent student award from the National Institute of Informatics (NII), Japan	2018
Full scholarship by Japanese government for Ph.D student	2016-2018
Full scholarship by Panasonic corporation for Master student	2006-2008
Several prizes in Mathematical Olympiads for secondary and high school students	before 1998

RESEARCH EXPERIENCE

Ph.D student at Department of Informatics, National Institute of Informatics, Japan. 2016 - 2019
Advisor: Prof. Atsuhiro Takasu
- My work focused on the intersection between Machine Learning, Natural Language Processing and Recommender Systems. I proposed some representation learning models for users and products from e-commerce transaction logs and textual data for product recommendation and product search.

Research Intern at Department of Informatics, National Institute of Informatics, Japan. 2015 - 2016
Advisor: Prof. Atsuhiro Takasu
- Developed a Bayesian-based model on location-based data for venue recommendations.

Master student at Japan Advanced Institute of Science and Technology, Japan. 2006 - 2008
Advisor: Prof. Ho Tu Bao
- Developed algorithms for multi-class classification of short texts.

PRESENTATION AND TALK

- Learning Representations from Product Titles for Modeling Shopping Transactions (**Poster**). At *RecNLP 2019 Workshop*, Honolulu, Hawaii, United States, 2019.
- NPE: Neural Personalized Embedding for Collaborative Filtering (**Oral+Poster**). At *IJCAI-ECAI-2018*, Stockhom, Sweden, 2018.
- A Probabilistic Model for the Cold-Start Problem in Rating Prediction using Click Data (**Oral**). At *ICONIP 2017*, GuangZhou, China, 2017.
- A Hierarchical Bayesian Factorization Model for Implicit and Explicit Feedback Data (**Oral**). At *ADMA 2017*, Singapore, 2017.
- Collaborative Item Embedding Model for Implicit Feedback Data (**Oral**). At *ICWE-2017*, Rome, Italy, 2017.

PUBLICATIONS

1. **ThaiBinh Nguyen**, Atsuhiro Takasu (2019). Learning Representations from Product Titles for Modeling Shopping Transactions. In *AAAI-19 Workshop on Recommender Systems and Natural Language Processing (RecNLP)*, Honolulu, Hawaii, United States.
2. **ThaiBinh Nguyen**, Atsuhiro Takasu (2018). NPE: Neural Personalized Embedding for Collaborative Filtering. In *Proceedings of the 27th International Joint Conference on Artificial Intelligence and the 23rd European Conference on Artificial Intelligence (IJCAI-ECAI 2018)*, Stockholm, Sweden.
3. **ThaiBinh Nguyen**, Atsuhiro Takasu (2017). A Probabilistic Model for the Cold-Start Problem in Rating Prediction using Click Data. In *Proceedings of The 24th International Conference on Neural Information Processing (ICONIP)*, Guangzhou, China.
4. **ThaiBinh Nguyen**, Atsuhiro Takasu (2017). A Hierarchical Bayesian Factorization Model for Implicit and Explicit Feedback Data. In *Proceedings of The 13th International Conference on Advanced Data Mining and Applications (ADMA)*, Singapore.
5. **ThaiBinh Nguyen**, Kenro Aihara, Atsuhiro Takasu (2017). Collaborative Item Embedding Model for Implicit Feedback Data. In *Proceedings of The 17th International Conference on Web Engineering (ICWE)*, Rome, Italy.
6. **Binh Nguyen**, Kenro Aihara, Atsuhiro Takasu (2015). City recommender system based on a latent topic model. In *IEICE Technical Report*, vol. 115, no. 381, AI2015-42, pp. 95-99, Okinawa, Japan.
7. **Nguyen, T.B**., Ho, T.B., Pham, C., Kawasaki, S. (2007). Matching Complex Documents Using Tolerance Rough Set Model. In *Proceedings of The 8th International Symposium on Knowledge and Systems Sciences (KSS07)*, pp.156-162, Ishikawa, Japan.

WORK EXPERIENCE

Data Scientist/AI Engineer at Rakuten Inc., Japan — Apr 2019 - present
- Build machine learning models on GPS data for the intelligent logistics project.
- Build machine learning models for predicting the Time Arriving of the drivers (ETA prediction).

Machine Learning Intern at Supership Inc., Japan — 2015 - 2016
- Implemented the multi-arms bandit algorithm for optimizing online advertisement.
- Implemented a model that predicts user genders based on website access log.
- Implemented data visualization tools for data mining team's internal management.

Lecturer at Hanoi University of Science and Technology, Vietnam — 2008 - 2015
- Taught Data Structures and Algorithms (classes of 40-50 students).
- Taught Mathematical Foundation for Informatics (classes of 40-50 students).

TECHNICAL SKILLS

- Proficient programmer in Python/Java/C++.
- 4+ years experience in Unix environment.
- 3+ years experience in machine learning/deep learning research.
- Practical experience with Pytorch, Tensorflow and Scikit-learn.

PROFESSIONAL ACTIVITIES

Conference reviewer: ICDM 2019, IJCAI 2019, RecSys 2019, PAKDD 2018.

REFERENCES

1. Dr. Atsuhiro Takasu (Professor)
   National Institute of Informatics, Japan.
   Email: takasu@nii.ac.jp
2. Dr. Panagiotis Andriotis (Senior Lecture)
   University of the West of England, Bristol, UK.
   Email: Panagiotis.Andriotis@uwe.ac.uk