

# THAI BINH NGUYEN

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## EDUCATION

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<b>SOKENDAI (The Graduate University for Advanced Studies)</b> Ph.D student in Computer Science Supervisor: Prof. Atsuhiko Takasu	2016 - Present <i>Japan</i>
<b>Japan Advanced Institute of Science and Technology</b> M.S in Computer Science	2006 - 2008 <i>Japan</i>
<b>Hanoi University of Science and Technology</b> B.S in Computer Science	1998 - 2003 <i>Vietnam</i>

## RESEARCH EXPERIENCE

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<b>SOKENDAI (The Graduate University for Advanced Studies)</b> Ph.D student in Computer Science My research includes: Probabilistic modeling, Deep learning, Graph embedding with applications to recommender systems. In details, I am interested in modeling graphs of heterogeneous entities (e.g., users, items, texts, images) using probabilistic modeling and deep learning for building a recommender systems with large scale and sparse data.	2016 - Present <i>Japan</i>
<b>Japan Advanced Institute of Science and Technology</b> Research student and Master student I worked in a project of building a system that can automatically identify the cause of a network error based on its description (in natural language). I proposed a model for efficiently representing short descriptions (by vectors) and then matching the description of a new error with the descriptions of the errors whose root causes are known.	2005 - 2008 <i>Japan</i>
<b>Hanoi University of Science and Technology</b> B.S in Computer Science I participated in the Fingerprint Recognition project. My task was to preprocess the fingerprint images and extract feature points from the images. These feature points will be used for the fingerprint matching phase.	2002 - 2003 <i>Vietnam</i>

## PUBLICATIONS

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1. **ThaiBinh Nguyen**, Kenro Aihara, Atsuhiko Takasu, “*Collaborative Item Embedding Model for Implicit Feedback Data*”, in Proceeding of The 17th International Conference on Web Engineering (ICWE), Rome, Italy, 2017.
2. **ThaiBinh Nguyen**, Atsuhiko Takasu, “*A Probabilistic Model for the Cold-Start Problem in Rating Prediction using Click Data*”, in Proceeding of The 24th International Conference on Neural Information Processing (ICONIP), Guangzhou, China, 2017.
3. **ThaiBinh Nguyen**, Atsuhiko Takasu, “*A Hierarchical Bayesian Factorization Model for Implicit and Explicit Feedback Data*”, in Proceeding of The 13th International Conference on Advanced Data Mining and Applications (ADMA), Singapore, 2017.
4. **ThaiBinh Nguyen**, Atsuhiko Takasu, “*Personalized Embedding for Recommender Systems*”, (preprint), 2017.
5. **ThaiBinh Nguyen**, Atsuhiko Takasu, “*A Deep Session Model for Session-based Recommendation*”, (preprint), 2017.
6. **Binh Nguyen**, Kenro Aihara, Atsuhiko Takasu, “*City recommender system based on a latent topic model*”, IEICE Tech. Rep., vol. 115, no. 381, AI2015-42, pp. 95-99, Dec. 2015

7. **Nguyen, T.B.**, Ho, T.B., Pham, C., Kawasaki, S, “*Matching Complex Documents Using Tolerance Rough Set Model*”, The 8th International Symposium on Knowledge and Systems Sciences KSS07, Ishikawa, Japan, Nov. 5-7, pp.156-162, 2007

## SKILLS

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<b>Research</b>	Probabilistic Modeling, Deep Learning, Recommender Systems
<b>Coding &amp; Tools</b>	Python, Tensorflow, Pytorch, C/C++, SQL, Hive, Latex
<b>Languages</b>	English, Japanese, Vietnamese

## INDUSTRIAL EXPERIENCE

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<b>Vietvang software solutions</b>	2012 - 2015
<i>Technical manager</i>	<i>Vietnam</i>

- I involved in various types of projects with Japan partners including mobile applications, web applications, CRM as a system designer, programmer and project manager.

<b>NCS Solutions</b>	2003 - 2005
<i>Programmer</i>	<i>Vietnam</i>

- I participated in building a software that captures the actions of users while interacting with computers. This software was used to generate visualized materials for Microsoft office learner: the instructor interacts with M.S office, and these actions are captured to form an interactive materials for learners. Programming language was C++.

## TEACHING EXPERIENCE

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<b>Hanoi University of Science and Technology (HUST), Vietnam</b>	2008 - 2015
<i>Lecturer at the School of Mathematics and Informatics</i>	<i>Vietnam</i>

- Probabilistics and Statistics
- Calculus 1, 2
- Data structures and Algorithms

## HONORS AND AWARDS

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Monbukagakusho scholarship (Japanese government) for Ph.D student	2016 - 2019
Monbukagakusho scholarship (Japanese government) for Research student	2015 - 2016
Panasonic scholarship (from Panasonic Ltd.) for studying Master in Japan <i>I am one of two Vietnamese students to be selected</i>	2006 - 2008
Panasonic scholarship (from Panasonic Ltd.) for Research student in Japan <i>I am one of two Vietnamese students to be selected</i>	2005 - 2006
Scholarship from the Ministry of Education and Training, Vietnam for excellent undergraduate student	1998 - 2003

## REFERENCES

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### **Professor Atsuhiko Takasu**

National Institute of Informatics.

Department of Informatics, SOKENDAI (The Graduate University for Advanced Studies)

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