

# NORIKI NISHIDA

RIKEN Center for Advanced Intelligence Project (AIP)

Nihonbashi 1-chome Mitsui Bldg., 15th floor, 1-4-1 Nihonbashi, Chuo-ku, Tokyo 103-0027, Japan

(+81)9056548111 ◇ noriki.nishida@riken.jp

<https://norikinishida.github.io>

## RESEARCH AREAS

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My research is aimed at automatically extracting useful knowledge from large numbers of documents, organizing them, and supporting knowledge retrieval and discovery. In particular, I focus on knowledge acquisition from biomedical articles and discourse analysis for that objective.

## EMPLOYMENT HISTORY

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- **Postdoctoral Researcher**, RIKEN AIP, April 2020 - Present.
- **Part-Time Lecturer**, University of Tsukuba, April 2022 - Present.
- **Visiting Researcher**, The University of Tokyo, July 2020 - June 2021.
- **Young Research Fellow (DC2)**, the Japan Society for the Promotion of Science, April 2018 - March 2020.
- **External Collaborator**, the PLU Group in AIRC, April 2016 - March 2020.
- **Part-time Software Engineer**, Logarhythm Inc., November 2014 - August 2015.

## EDUCATION

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### **Ph.D. of Information Science and Technology**

*March 2020*

Department of Creative Informatics

Graduate School of Information Science and Technology

The University of Tokyo

*Dissertation title:* “Unsupervised Induction of Natural Language Discourse Structure Based on Rhetorical Structure Theory”

*Advisor:* Hideki Nakayama

### **Master’s Degree in Information Science and Technology**

*March 2017*

Department of Creative Informatics

Graduate School of Information Science and Technology

The University of Tokyo

*Thesis title:* “Unsupervised Learning of Syntactically Plausible Word Representations by Solving Word Ordering”

*Advisor:* Hideki Nakayama

### **Bachelor’s Degree in Engineering**

*March 2015*

Department of Information and Communication Engineering

Faculty of Engineering

The University of Tokyo

*Thesis title:* “Hand Gesture Recognition Using Recurrent Convolutional Neural Networks”

*Advisor:* Hitoshi Iba, Yoshihiko Hasegawa

## TEACHING HISTORY

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- **Data Science**, University of Tsukuba, October 2022 - March 2023.
- **Information Literacy**, University of Tsukuba, April 2022 - September 2022.
- **Data Science**, The University of Tokyo, TA, October 2017 - March 2018.
- **Basic Programming Exercise**, The University of Tokyo, TA, October 2014 - March 2015.

## PUBLICATIONS

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### Journal Articles

- Noriki Nishida and Yuji Matsumoto. 2022.  
**Out-of-Domain Discourse Dependency Parsing via Bootstrapping: An Empirical Analysis on Its Effectiveness and Limitation.**  
Transactions of the Association for Computational Linguistics, vol.10, pp.127–144. (presented in ACL 2022)
- Noriki Nishida and Hideki Nakayama. 2020.  
**Unsupervised Discourse Constituency Parsing Using Viterbi EM.**  
Transactions of the Association for Computational Linguistics, vol.8, pp.215–230. (presented in ACL 2020)
- Hideki Nakayama and Noriki Nishida. 2017.  
**Zero-Resource Machine Translation by Multimodal Encoder-Decoder Network with Multimedia Pivot.**  
Machine Translation, vol.31, no.1, pp.49–64.

### International Conferences (refereed)

- Hisashi Kamezawa, Noriki Nishida, Nobuyuki Shimizu, Takashi Miyazaki, Hideki Nakayama. 2022.  
**RNSum: A Large-Scale Dataset for Automatic Release Note Generation via Commit Logs Summarization.**  
In Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (ACL 2022).
- Hisashi Kamezawa, Noriki Nishida, Nobuyuki Shimizu, Takashi Miyazaki, Hideki Nakayama. 2020.  
**A Visually-grounded First-person Dialogue Dataset with Verbal and Non-verbal Responses.**  
In Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP 2020).
- Noriki Nishida and Hideki Nakayama. 2018.  
**Coherence Modeling Improves Implicit Discourse Relation Recognition.**  
In Proceedings of the 19th Annual Meeting of the Special Interest Group on Discourse and Dialogue (SIGDIAL 2018).
- Noriki Nishida and Hideki Nakayama. 2017.  
**Word Ordering as Unsupervised Learning Towards Syntactically Plausible Word Representations.**

In Proceedings of the 8th International Joint Conference on Natural Language Processing (IJCNLP 2017).

- Natsuda Laokulrat, Sang Phan, Noriki Nishida, Raphael Shu, Yo Ehara, Naoaki Okazaki, Yusuke Miyao, Shin'ichi Satoh, Hideki Nakayama. 2016.

**Generating Video Description Using Sequence-to-Sequence Model with Temporal Attention.**

In Proceedings of the 26th International Conference on Computational Linguistics (COLING 2016).

- Noriki Nishida and Hideki Nakayama. 2015.

**Multimodal Gesture Recognition Using Multi-Stream Recurrent Neural Network.**

In Proceedings of the 7th Pacific-Rim Symposium on Image and Video Technology (PSIVT 2015).

## International Workshops

- Jun Takeuchi, Noriki Nishida, and Hideki Nakayama. 2022.

**Neural Networks in a Product of Hyperbolic Spaces.**

Proceedings of the 2022 Conference of the North American Chapter of the Association for Computational Linguistics: Student Research Workshop (NAACL-SRW 2022).

- Noriki Nishida and Yuji Matsumoto. 2022.

**GENIA-DTB: A Discourse Dependency Treebank for Biomedical Paper Abstracts.**

In Fifth International Workshop on SCientific DOCument Analysis (SCIDOCA 2022).

- Noriki Nishida and Yuji Matsumoto. 2020.

**An Empirical Study of Proxy-labeling for Adaptation of Discourse Dependency Parsing.**

In Fourth International Workshop on SCientific DOCument Analysis (SCIDOCA 2020).

- Shibahara Takayoshi, Ikuya Yamada, Noriki Nishida, Shanshan Liu, Kouji Kozaki, Taro Watanabe, Yuji Matsumoto. 2020.

**Preliminary Experiments of Span-based Distant Supervision for Biomedical NER.**

In Fourth International Workshop on SCientific DOCument Analysis (SCIDOCA 2020).

## AWARDS

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- **Outstanding Reviewer**, the 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP), December 2020.
- **Young Researcher Encouragement Award**, the Annual Meeting of the Association for Natural Language Processing (NLP), March 2020.
- **Annual Conference Award**, the Japanese Society of Artificial Intelligence (JSAI), July 2017.

## TALKS

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- **Machine Learning for Knowledge Acquisition from Scholarly Articles.**  
The 2022 Annual Meeting of the Biometric Society of Japan, May 2022.
- **Towards Unsupervised Discourse Parsing.**  
The Perception and Language Understanding (PLU) Group in Artificial Intelligence Research Center (AIRC), Japan, November 2018.
- **Deep Learning for Computer Vision.**

Kansai Chapter of the Acoustic Society of Japan, March 2016.

- **Deep Learning for Video Recognition.**

Prometech Simulation Conference, Japan, September 2015.

## RESEARCH GRANTS

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- **JST AIP Challenge Program**, July 2022 - March 2023.
- **JSPS KAKENHI Grant-in-Aid for Transformative Research Areas (B) (Co-Investigator)**, May 2022 - March 2025.
- **JSPS KAKENHI Grant-in-Aid for Early-Career Scientists**, April 2021 - March 2024.
- **JSPS KAKENHI Research Fellowship for Young Scientists (DC2)**, April 2018 - March 2020.

## ACADEMIC ACTIVITIES

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- Journal Editor
  - Journal of Natural Language Processing
- Journal Reviewer
  - Language Resources and Evaluation
  - ACM Transactions of Asian and Low-Resource Language Information Processing
  - Journal of Natural Language Processing
- Conference Reviewer
  - ACL Rolling Review
  - ACL, NAACL, EACL
  - EMNLP
  - COLING
  - AAAI
  - IJCAI
  - ANLP (domestic conference)
  - MIRU (domestic conference)

## SKILLS

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**Natural Language Processing**  
**Machine Learning**  
**Computer Vision**  
**Programming**

Knowledge Acquisition, Information Extraction, Document Analysis  
Deep Learning, Unsupervised Learning, Semi-Supervised Learning  
Video (Gesture) Recognition, OpenCV  
Python, Java, C++, C, SQL, Linux