NORIKI NISHIDA

RIKEN Center for Advanced Intelligence Project (AIP)

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https://norikinishida.github.io

RESEARCH INTERESTS

I work in the area of natural language processing and computational linguistics. I am interested in uncovering natural language structures in a data-driven manner. Currently, I am focusing on discourse parsing and its application to knowledge acquisition from scientific papers.

PROFESSIONAL EMPLOYMENT

Post-doctoral Researcher, RIKEN Center for Advanced Intelligence Project (AIP), April 2020 - Present.

EDUCATION

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

PROFESSIONAL EXPERIENCE

- 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.
- Teaching Assistant in Data Science, the University of Tokyo, October 2017 March 2018.

• **Teaching Assistant** in Basic Programming Exercise, the University of Tokyo, October 2014 - March 2015.

PUBLICATION

Journal Articles

• Unsupervised Discourse Constituency Parsing Using Viterbi EM.

Noriki Nishida and Hideki Nakayama.

Transactions of the Association for Computational Linguistics, vol.8, pp.215–230, 2020.

• Zero-Resource Machine Translation by Multimodal Encoder-Decoder Network with Multimedia Pivot.

Hideki Nakayama and Noriki Nishida.

Machine Translation, vol.31, no.1, pp.49-64, 2017.

Refereed Conference Proceedings

• Coherence Modeling Improves Implicit Discourse Relation Recognition.

Noriki Nishida and Hideki Nakayama.

In Proceedings of the 19th Annual Meeting of the Special Interest Group on Discourse and Dialogue, 2018.

• Word Ordering as Unsupervised Learning Towards Syntactically Plausible Word Representations.

Noriki Nishida and Hideki Nakayama.

In Proceedings of the 8th International Joint Conference on Natural Language Processing, 2017.

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

Natsuda Laokulrat, Sang Phan, <u>Noriki Nishida</u>, Raphael Shu, Yo Ehara, Naoaki Okazaki, Yusuke Miyao, Shin'ichi Satoh, and Hideki Nakayama.

In Proceedings of the 26th International Conference on Computational Linguistics, 2016.

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

Noriki Nishida and Hideki Nakayama.

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

Non-refereed Domestic Conferences

• Exploiting Discourse Irreducibility for Unsupervised Nuclearity Classification.

Noriki Nishida and Hideki Nakayama.

In Proceedings of the 26th Annual Meeting of the Association for Natural Language Processing, 2020.

Young Researcher Encouragement Award.

• Unsupervised Paraphrase Generation by Reordering Noun Phrases.

Shota Sugiura, Noriki Nishida, and Hideki Nakayama.

In Proceedings of the 26th Annual Meeting of the Association for Natural Language Processing, 2020.

• RST Discourse Structure Improves Story Ending Generation.

Hong Chen, Noriki Nishida, Raphael Shu, Naoaki Okazaki, and Hideki Nakayama.

In Proceedings of the 26th Annual Meeting of the Association for Natural Language Processing, 2020.

• Discourse Constituent-Context Model for Unsupervised Discourse Constituency Parsing.

Noriki Nishida and Hideki Nakayama.

In Proceedings of the 25th Annual Meeting of the Association for Natural Language Processing, 2019.

• Vision Mediated Story Generation.

Hong Chen, Raphael Shu, Noriki Nishida, and Hideki Nakayama.

In Proceedings of the 25th Annual Meeting of the Association for Natural Language Processing, 2019.

• Semi-Supervised Implicit Discourse Relation Recognition Using Coherence Modeling. Noriki Nishida and Hideki Nakayama.

In Proceedings of the 24th Annual Meeting of the Association for Natural Language Processing, 2018.

• Automatic Coding Style Evaluation Using Recurrent Neural Networks.

Yuki Kobayashi, Noriki Nishida, and Shigeru Chiba.

In Proceedings of the 34th Japan Society for Software Science and Technology (JSSST) Annual Conference, 2017.

Student Incentive Award.

• Learning Syntactically Plausible Word Representations by Solving Word Ordering.

Noriki Nishida and Hideki Nakayama.

In Proceedings of the 31st Annual Conference of the Japan Society for Artificial Intelligence, 2017. Annual Conference Award.

AWARD

- 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.

GRANT

• Young Research Fellowship (DC2) from the Japan Society for the Promotion of Science with research fund of approximately 75,000 USD/year, April 2018 - March 2020.

TALK

• Towards Unsupervised Discourse Parsing.

At the Perception and Language Understanding (PLU) Group in Artificial Intelligence Research Center (AIRC), Japan, November 2018.

• Deep Learning for Computer Vision.

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

• Deep Learning for Video Recognition.

At Prometech Simulation Conference, Japan, September 2015.

REVIEWER

- IJCAI-PRICAI2020
- ACL2020
- AAAI2019
- IJCAI2018

SKILL

Natural Language Processing Machine Learning Computer Vision Programming Document/sentence structure analysis, text mining Unsupervised learning, deep learning, multimodal processing Video (gesture) recognition, OpenCV Python, Java, C, C++, SQL, Linux