## NORIKI NISHIDA

Graduate School of Information Science and Technology, The University of Tokyo IREF bldg., 1-1-1 Yayoi, Bunkyo-ku, Tokyo, Japan  $(+81)9056548111 \Leftrightarrow nishida@nlab.ci.i.u-tokyo.ac.jp$ 

http://www.nlab.ci.i.u-tokyo.ac.jp/~nishida/

### **EDUCATION**

## Ph.D. Student in Information Science and Technology

Apr. 2017 - Present

Department of Creative Informatics

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

Apr. 2015 - Mar. 2017

Department of Creative Informatics

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

Apr. 2009 - Mar. 2015

Department of Information and Communication Engineering

The University of Tokyo

Thesis title: "Hand Gesture Recognition Using Recurrent Convolutional Neural Networks"

Advisor: Hitoshi Iba, Yoshihiko Hasegawa

### RESEARCH INTERESTS

I work in the area of natural language processing (computational linguistics). I am interested in uncovering structures, rules, and knowledge behind linguistic phenomena in a data-driven manner. In particular, I am working on problems related to automated text analysis (parsing). I am also interested in unsupervised learning of natural languages.

### PROFESSIONAL EMPLOYMENT

Research Fellow (DC2), The Japan Society for the Promotion of Science

Apr. 2018 - Present

## AWARDS & HONORS

Research Fellowship (DC2) from the Japan Society for the Promotion of Science with research fund of approximately 75,000 USD/year for two years.

Apr. 2018 - Present

The Japan Society of Artificial Intelligence Annual Conference Award

Jul. 2017

### **Under Review**

• A work on unsupervised discourse nuclearity identification.

### Journal Articles

• Unsupervised Discourse Constituency Parsing Using Viterbi EM.

Noriki Nishida and Hideki Nakayama.

Transactions of the Association for Computational Linguistics, to appear.

• 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.

## **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. (in Japanese)

• 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. (in Japanese)

• 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. (in Japanese)

## • 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. (in Japanese)

## • 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. (in Japanese)

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.

#### INVITED TALKS

### • Towards Unsupervised Discourse Parsing.

At The Perception and Language Understanding (PLU) Group at Artificial Intelligence Research Center (AIRC), Japan, Nov. 2018.

### • Deep Learning for Computer Vision.

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

## • Deep Learning for Video Recognition.

At Prometech Simulation Conference, Japan, Sep. 2015.

## WORK EXPERIENCES

External Collaborator, The PLU Group at AIRC.Apr. 2016 - PresentPart-time Software Engineer, Logarhythm Inc.Nov. 2014 - Aug. 2015Teaching Assistant, Data science, The University of Tokyo.Oct. 2017 - Mar. 2018Teaching Assistant, Basic programming exercise, The University of Tokyo.

#### **SKILLS**

Natural Language ProcessingDocument/sentence structure analysis, text miningMachine LearningUnsupervised learning, deep learning, multimodal processingComputer VisionVideo (gesture) recognition, OpenCVProgrammingPython, Java, C, C++, SQL, Linux