

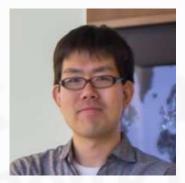
Public Lecture Announcement

Together with the VocaTT research group, Waseda University and the Center for English Language Education in Science and Engineering (CELESE) are co-sponsoring a public lecture as follows.

Title: Machine Learning for Language Learning

Speaker: Masato Hagiwara, Ph.D.

Abstract: Language education and assessment are a data- and laborintensive process which requires creation and analysis of a large amount of linguistic data. In this talk, we are going to discuss some of the ways in which machine learning (ML) and natural language processing (NLP) can automate the process of creating, calibrating, grading, and generating education materials and learner production for language learning. Specifically, we'll discuss 1) readability assessment and difficulty



estimation of test items and reading materials with traditional ML and deep neural networks, 2) analysis of grammatical structures with pretrained masked language models (BERT), and 3) grammar-controlled generation of language materials with pretrained causal language models (GPT). We show that recent advancement of deep NLP and ML technologies have continuously pushed the boundary of what's possible in assisting humans to learn language more effectively.

Speaker info: Dr. Hagiwara is a graduate of Nagoya University Graduate School of Information Science where he worked on methods to extract synonym information from texts. Since then, he has worked at and with a number of well-known industry leaders in technology and education including Baidu, Rakuten, and Duolingo as both a researcher and engineer in NLP. He continues to work in this field as owner of Octanove Labs.

Time: Tuesday, August 24, 2021, 09:00–10:00 (JST) 09:00–09:05: Welcome & Introduction 09:05–09:50: Lecture by Dr. Hagiwara 09:50–10:00: Question time

Location: Online (Zoom)

Participation in this event is free, but pre-registration is required. If you wish to join, please fill in the form at the following link by 17:00, August 23 (JST).

https://forms.office.com/r/VWB0gaKNpu

Contact: Questions about this event may be addressed to Ralph Rose [rose@waseda.jp].