# Sosuke Nishikawa

🖂 sosuken115@gmail.com | 🏕 sosuke115.github.io | 🗘 Sosuke115 | in sosuke-nishikawa-2100581a0 | 💆 @ponyo\_ponyo115

# Personal Profile Statement

A master's student at the University of Tokyo with experience in software and machine learning. Skilled at operating in a wide range of platforms and programming. Praised for the ability to work hard and to achieve goals. Currently studying natural language processing using deep learning.

## Education

- Master's student in Information Science and Technology, The University of Tokyo, Echizen lab. Apr. 2020 Mar. 2022 (Expected graduation)
- B.E. in Electrical Engineering and Computer Science, The University of Tokyo, Tsuruoka lab. Mar. 2020, GPA: 3.8/4.2

# Work and Research Experience \_\_\_\_\_

#### **Echizen Lab, National Institute of Informatics**

Tokyo, Japan

Feb. 2021 - Feb. 2021

Aug. 2020 - Aug. 2020

RESEARCH ASSISTANT

- Apr. 2020 PRESENT
- · Research on adversarial examples in NLP • Research on multilingual models

**Studio Ousia** Tokyo, Japan

RESEARCH ENGINEER (PART TIME) Feb. 2020 - PRESENT

• Research on introducing entity representations into pre-trained language models

CyberAgent Inc. Tokyo, Japan

MACHINE LEARNING ENGINEER INTERNSHIP (ONE-MONTH) Worked on information extraction from web documents.

SONY Tokyo, Japan

RESEARCH ENGINEER INTERNSHIP (ONE-MONTH) Sep. 2020 - Oct. 2020

· Research on dialogue systems and classification of conversations in text

Cookpad Inc. Tokyo, Japan

MACHINE LEARNING ENGINEER INTERNSHIP (TWO-WEEK) Sep. 2020 - Sep. 2020

• Developed the API that predicts ingredients from recipes

· Improved recommendation models using graph embedding

Wantedly Inc. Tokyo, Japan

MACHINE LEARNING ENGINEER INTERNSHIP (ONE-MONTH)

Stockmark Inc. Tokyo, Japan

Dec. 2018 - Dec. 2019 SOFTWARE ENGINEER (PART TIME)

· Created web application that allows users to understand at a glance who is familiar with which fields

## Publication \_\_\_\_

## REFEREED

## A Multilingual Bag-of-Entities Model for Zero-Shot Cross-Lingual Text Classification

- Accepted to ACL-IJNLP SRW 2021 (non-archival option is used for future publication)
- · Under review by ACL Rolling Review
- Sosuke Nishikawa, Ikuya Yamada, Yoshimasa Tsuruoka, Isao Echizen

# Data Augmentation with Unsupervised Machine Translation Improves the Structural Similarity of Cross-lingual Word Embeddings

- Proceedings of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing: Student Research Workshop (ACL-IJCNLP SRW 2021)
- Sosuke Nishikawa, Ryokan Ri and Yoshimasa Tsuruoka

#### Non-Refereed

#### エンティティの言語間リンクに基づく多言語モデルの構築

- A Multilingual Bag-of-Entities Model for Zero-Shot Cross-Lingual Text Classification
- Proceedings of the 27th Annual Meeting of the Association for Natural Language Processing (NLP2021)
- Sosuke Nishikawa, Ikuya Yamada, Yoshimasa Tsuruoka, Isao Echizen

# マルチラベル分類による材料推薦モデル

- A Model for Recommending Cooking Ingredients Using Multi-Label Classification
- Proceedings of the 27th Annual Meeting of the Association for Natural Language Processing (NLP2021)
- · Yusuke Fukasawa, Jun Harashima, Sosuke Nishikawa

#### Studio Ousia at the NTCIR-15 SHINRA2020-ML Task

- 15th NTCIR Conference
- · Sosuke Nishikawa, Ikuya Yamada

#### 教師なし機械翻訳の出力結果から作成した多言語分散表現の分析

- Analysis of bilingual word embeddings using pseudo corpus generated from Unsupervised Machine Translation
- Proceedings of the 26th Annual Meeting of the Association for Natural Language Processing (NLP2020)
- Sosuke Nishikawa, Yoshimasa Tsuruoka

# Awards \_

## **JGC-S scholarship foundation**

Scholarship for study abroad program.

# Competences .

**Languages** Japanese (native), English (conversant, IELTS 6.0)

**Programming** Python, JavaScript/TypeScript, Ruby, C/C++, ŁTEX, HTML/CSS, MySQL, Google Apps Script, Java, Go

**Libraries and Services** Pytorch, Tensorflow, Keras, Docker, Amazon Web Service, d3.js, express.js

**Competitive prog.** Atcoder sosuke115 (rate 1003)