# Yoshinari Fujinuma

Office Address fujinumay@gmail.com

http://akkikiki.github.io

Dec 2021

Twitter: @akkikiki

**Education** University of Colorado Boulder, USA

Ph.D. in Computer Science

Advisors

- Katharina Kann(2020-2021), Jordan Boyd-Graber(-2021), Michael J. Paul (-2019)

University of Tokyo, Japan Sep 2014

M.S. in Computer Science; Advisor: Akiko Aizawa

International Christian University, Japan Mar 2012

B.A. in Computer Science and Mathematics; Advisor: Grant Pogosyan

Professional Experience

Virtual

Applied Scientist, Amazon.com, Inc., USA Sep 2021 - Present

• CSCI 4622 Machine Learning (Github Repo)

Teaching Assistant, Univ. of Colorado Boulder, USA Jan-Dec 2020, May-Jul 2021

Applied Scientist Intern, Amazon.com, Inc., USA May 2020 - Aug 2020

Research Assistant, Univ. of Colorado Boulder, USA Aug 2016 - Dec 2019

Applied Scientist Intern, Amazon.com, Inc., USA May 2018 - Aug 2018

Software Dev Engineer, Amazon Japan K.K., Japan Oct 2014 - Aug 2016

Software Engineer Intern, Amazon Japan K.K., Japan Nov 2013 - Feb 2014

Part-time Engineer, Atilika, Japan Aug- Nov 2013, Apr- Sep 2014

Software Engineer Intern, Cookpad, Japan July 2013 (one month)

Publications

- Yoshinari Fujinuma\*, Siddharth Varia\*, Nishant Sankaran, Srikar Appalaraju, Bonan Min, Yogarshi Vyas: "A Multi-Modal Multilingual Benchmark for Document Image Classification", EMNLP Findings (long) 2023
- Sharon Levy, Neha Anna John, Ling Liu, Yogarshi Vyas, Jie Ma, Yoshinari Fujinuma, Miguel Ballesteros, Vittorio Castelli, and Dan Roth: "Comparing Biases and the Impact of Multilingual Training across Multiple Languages", EMNLP (long) 2023
- Pietro Lesci, Yoshinari Fujinuma, Momchil Hardalov, Chao Shang, Lluis Marquez:
  "Diable: Efficient Dialogue State Tracking as Operations on Tables", ACL Findings (long) 2023
- Yoshinari Fujinuma, Jordan Boyd-Graber, Katharina Kann: "Match the Script, Ādapt if Multilingual: Analyzing the Effect of Multilingual Pretraining on Cross-lingual Transferability", ACL (long) 2022
- Yoshinari Fujinuma, Masato Hagiwara: "Semi-Supervised Joint Estimation of Word and Document Readability", TextGraphs-15@NAACL (short) 2021

- Mozhi Zhang\*, Yoshinari Fujinuma\*, Michael J. Paul, Jordan Boyd-Graber: "Why Overfitting Isn't Always Bad: Retrofitting Cross-Lingual Word Embeddings to Dictionaries", ACL (short) 2020
- Mozhi Zhang, Yoshinari Fujinuma, Jordan Boyd-Graber: "Exploiting Cross-Lingual Subword Similarities in Low-Resource Document Classification", AAAI 2020
- Yoshinari Fujinuma, Jordan Boyd-Graber, Michael J. Paul: "A Resource-Free Evaluation Metric for Cross-Lingual Word Embeddings based on Graph Modularity". ACL (long) 2019
- Dasha Pruss, Yoshinari Fujinuma, Ashlynn R. Daughton, Michael J. Paul, Brad Arnot, Danielle Albers Szafir, Jordan Boyd-Graber: "Zika discourse in the Americas: A multilingual topic analysis of Twitter", PLOS ONE 2019
- Mozhi Zhang, Yoshinari Fujinuma, Jordan Boyd-Graber: "Exploiting Cross-Lingual Subword Similarities in Low-Resource Document Classification", Workshop on Deep Learning Approaches for Low-Resource Natural Language Processing, 2018
- Yoshinari Fujinuma, Alvin Grissom II: "Substring Frequency Features for Segmentation of Japanese Katakana Words with Unlabeled Corpora", IJCNLP (short) 2017
- Yoshinari Fujinuma, Hikaru Yokono, Pascual Martínez-Gómez, Akiko Aizawa: "Distantsupervised Language Model for Detecting Emotional Upsurge on Twitter", PACLIC (long) 2015

## Selected Projects Analysis on Multilingual Pretraining

2020 - 2021

2017 - 2019

• Investigating the effect of using different pretraining languages. (Paper)

# Intrinsic Evaluation Measure for Cross-Lingual Embeddings

• Developed a graph-based intrinsic measure to evaluate the quality of cross-lingual word embeddings. (Paper)

#### Finite State Transducer (FST) for Kuromoji

2015

• Replaced a double-array trie to an FST for Kuromoji, a java-based Japanese tokenizer used in Lucene, Solr, and Elastic Search. (Github Repo)

## Academic Service

### Area Chair:

- 2023 ACL (Multilingualism & Cross-lingual NLP track)
- 2023 EMNLP (Multilingualism & Linguistic Diversity Track)

## Program Committee/Reviewer:

- 2023 AAAI, ACL Rolling Review (Feb., Apr.), EACL
- 2022 AAAI, ACL Rolling Review (Jan., Mar., Jun., Oct., Dec.), ACL, EMNLP, NAACL SRW, W-NUT, CoNLL
- 2021 NAACL, ACL, EMNLP, ACL Rolling Review (Sept., Oct., Nov.), CoNLL, NAACL SRW, ACL SRW, W-NUT, Workshop on NLP for Indigenous Languages of the Americas (AmericasNLP)
- 2019 Workshop on Noisy User-Generated Text (W-NUT)

Secondary Reviewer: 2019 ACL, 2017 EMNLP, 2017 WWW

Student Volunteer: 2020 ACL

# Academic Honors

| • Outstanding Reviewer for CoNLL  | 2021   |
|---|--------|
| • Departmental Travel Grant from CU Boulder (300 USD)                       | 2017   |
| • Gruduate School Travel Grant from CU Boulder (500 USD)                    | 2017   |
| • Dean's Fellowship from CU Boulder (1/2 of the yearly tuition and stipend) | 2016   |
| • Gruduate School Travel Grant from Univ. of Tokyo (80,000 JPY)             | 2013   |
| • Gödel Foundation Prize: Best Bachelor thesis in CS and Math (50,000 JPY)  | 2012   |
| • Horie Takematsu and Koh Scholarship (2,000 USD)                           | 2010   |
| • Student Scholarship from ICU (1/3 of the yearly tuition) 200              | 8-2012 |

<sup>\*</sup>denotes equal contribution

Computer and Language Skills <u>Languages:</u> Proficient: Python; Intermediate: C++, Java

Software: PyTorch, Git, Vim, LATEX, MySQL

English: TOEFL iBT 101 (2015)

Domain-specific: machine learning, natural language processing