Zheng Xin Yong

Curriculum Vitae

Department of Computer Science Brown University zheng_xin_yong@brown.edu https://yongzx.github.io/

Education

2021 Ph.D. in Computer Science

- CURRENT Brown University, *Providence*, *RI*.

Advisor: Prof. Stephen Bach

2017 - 2021 B.Sc. in Computational Sciences & Business

Minerva University, San Francisco, CA.

Thesis: Representation Learning for Frame-Semantic Resources

Publications

2022 Frame Shift Prediction

Z. X. Yong, P. D. Watson, T. T. Torrent, O. Czulo, and C. F. Baker. Conference on Language Resources and Evaluation (LREC), To Appear

Adapting BigScience Multilingual Model to Unseen Languages

Z. X. Yong* and V. Nikoulina*.

ACL Workshop on Challenges and Perspectives in Creating Large Language Models

PromptSource: An Integrated Development Environment and Repository for Natural Language **Prompts**

S. H. Bach*, V. Sanh*, Z. X. Yong, A. Webson, C. Raffel, N. V. Nayak, A. Sharma, T. Kim, M. S. Bari, T. Fevry, Z. Alyafeai, M. Dey, A. Santilli, Z. Sun, S. Ben-David, C. Xu, G. Chhablani, H. Wang, J. A. Fries, M. S. Al-shaibani, S. Sharma, U. Thakker, K. Almubarak, X. Tang, T. J. Jiang, and A. M. Rush. Association for Computational Linguistics (ACL), Demo Track.

Multitask Prompted Training Enables Zero-Shot Task Generalization

V. Sanh*, A. Webson*, C. Raffel*, S. H. Bach*, L. Sutawika, Z. Alyafeai, A. Chaffin, A. Stiegler, T. L. Scao, A. Raja, M. Dey, M. S. Bari, C. Xu, U. Thakker, S. Sharma, E. Szczechla, T. Kim, G. Chhablani, N. V. Nayak, D. Datta, J. Chang, T. J. Jiang, H. Wang, M. Manica, S. Shen, Z. X. Yong, H. Pandey, R. Bawden, T. Wang, T. Neeraj, J. Rozen, A. Sharma, A. Santilli, T. Fevry, J. A. Fries, R. Teehan, S. Biderman, L. Gao, T. Bers, T. Wolf, and A. M. Rush.

International Conference on Learning Representations (ICLR). Selected for spotlight presentation.

2020 Semi-supervised Deep Embedded Clustering with Anomaly Detection for Semantic Frame Induc-

Z. X. Yong and T. T. Torrent.

Conference on Language Resources and Evaluation (LREC).

Research Internship Experience

Jun, 2020 FrameNet Brasil | Federal University of Juiz de Fora

- Nov, 2020 Project: Analyzing and predicting cross-lingual semantic frame shifts using graph neural networks... Mentors: Collin F. Baker, Tiago T. Torrent, Oliver Czulo, Ely Matos

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m Sep},\,2019$ Minerva-Masason Foundation Artificial Intelligence Lab

Aug, 2020 Project: Image recoloring for graphic designs.

Mentor: Patrick Watson

 $\mathrm{Jun},\ 2019$ Red Hen Lab

- Dec, 2019 Project: Semi-supervised representation learning for expanding FrameNet.

Mentor: Tiago T. Torrent

 $\mathrm{Jun},\ 2018$ The Interface Financial Group

- MAY, 2019 Project: Information extraction for unstructured financial documents..

Mentor: Ross Biro

JAN, 2018 Pilot, Inc

- Apr., 2018 Project: Rule-based and statistical-based named-entity recognition for financial memos..

Mentor: Louise Vigeant

Industrial Internship Experience

Feb, 2021 Glint Solar

- MAY,2021 Machine Learning Engineer Intern, Oslo, Norway.

Create classification models for identifying natural lakes and human-made reservoirs from satellite images.

 A_{PR} , 2020 - Mozilla Corporation

Jun, 2020 Fix-The-Internet Builder, California, USA.

Created a full-stack mobile-friendly platform to provide Al-driven feedback (such as attention and popularity prediction) to graphic designers.

 $\mathrm{DEC},\ 2018-$ Recruit Co., Ltd.

APR, 2019 Machine Learning Engineer Intern, Tokyo, Japan.

Developed an end-to-end machine learning pipeline using Luigi and researched NLP models for automated essay scoring in Japanese.

 $\mathrm{DEC},\ 2017-$ The Last Mile

APR, 2018 Lead Platform Developer, California, USA.

Led ten students to design JavaScript learning curriculum and built a coding platform for prisoners in San Quentin State Prison.

 $Sep.\ 2017$ - Minerva Schools at Keck Graduate Institute

APR, 2018 Product Team Intern, California, USA.

Designed fuzzy string searching algorithm to compare and search school addresses on Google to make de-duplicating SQL database 40% faster.

Research Mentoring

2022 Imam Hasan Araf

Undergraduate Student, Rowan University.

Project: Named entity recognition for unseen entity labels.

Program: ExploreCSR - Socially-Responsible AI for Computational Creativity

2019 - 2021 Shutaro Aoyama

Undergraduate Student, University of Tokyo.

Project: Generative NLP models for note-taking app (edtech).

Program: Masason Foundation Mentorship

2019 - 2021 Yuri Morizane

Undergraduate Student, Osaka University.

Project: Bayesian model for medical image construction.

Program: Masason Foundation Mentorship

Professional Services

Reviewer.

ACL Rolling Review: 2022 - Present

ACL: 2021 EMNLP: 2021

Language Resources and Evaluation Journal: 2021

The Workshop on Weakly Supervised Learning at ICLR: 2021

Competences

Programming Python, Java, JavaScript, C/C++, R, MySQL, Unix Shell

Libraries and PyTorch, TensorFlow, Keras, NLTK, Amazon Web Service, Google Cloud Platform, Docker, Singularity,

Services Heroku, LATEX, Git