Bohan Zhang

Tel: 1-(614)-696-3016 Email: zbohan@umich.edu

Education

University of Michigan — Aug 2020 - Present
M.S. in Computer Science and Engineering

The Ohio State University — Aug 2017 - May 2020
B.S. in Computer Science and Engineering, Summa Cum Laude
Minor in Linguistics

- GPA: 3.988/4.00.
- Core Courses: Machine Learning, Foundations of Speech and Language Processing, Computational Linguistics I, II, Social Media and Text Analytics, Syntax.

Xiamen University — Aug 2015 - July 2017
Major in Computer Science and Technology (Transferred out)

- GPA: 3.78/4.00, 90.87/100
- Rank: 1/91
- Core Courses:Probability and Statistic, Numerical Methods, Linear Algebra, Discrete Mathematics, Pattern Recognition.

Research Experiences

Research Assistant, NLP Lab at Texas A&M University May 2019 - Aug 2019

- Advisor: Ruihong Huang
- Project: Predicting sentence deletions for text simplification using a functional discourse structure
- Abstract: Some sentences from an original article are simply deleted and ignored for document-level text simplification. We explore the use of a genre-specific functional discourse structure for predicting sentence deletions. The news-specific functional structure we considered categorizes sentences based on their contents and their function roles in telling a news story. We incorporate sentence categories into a neural net model in two ways for predicting sentence deletions, either as additional features or by jointly predicting sentence deletions and sentence categories. Experiments show that incorporating the functional structure noticeably improves the recall of sentence deletion prediction.
- In submission of EMNLP 2020.

Research Assistant, The Ohio State University Jan 2019 - April 2019

- Advisor: Wei Xu
- Project: Automatical sentence alignments for simplified and original articles pairs
- Annotation for the sentence alignments between different levels of simplification in Newsela dataset.

Working Experiences

Instructor Assistant, The Ohio State University Jan 2019 - May 2020

- Course: CSE 2421 - Introduction to Low-Level Programming and Computer Organization

Other Projects

Entity Extraction in Wet Lab Protocols Sep 2019 - Dec 2019

- Reproducing maximum entropy and BiLSTM-CRF model on an entity extraction task in a wet lab protocol corpus.
- Using Actor-Critic training combined with maximum likelihood loss to outperform the previous state-of-the-art results.
- Using SciBert to achieve new state-of-the-art results.

Exposure Bias in Seq2Seq Task-Using Semantic Parsing and Machine Translation as Examples Mar 2020 - May 2020

- Exploring exposure bias problem in Seq2Seq model using semantic parsing and machine translation tasks.
- Adopting scheduled sampling strategies to potentially address the exposure bias.

Political Preference Classification by Text Analysis Mar 2019 - May 2019

- Mining tweets of a list of politicians and proposing a text classification network to indicate a politician's political preference based on one's tweets.
- Considering different types of embeddings weighted by TF-IDF value and the number of pre-trained words cluster information as additional features to help in predicting the preference.

Reproduction of the SuperMario Game Jan 2019 - May 2019

- Reproducing the SuperMario Game and creating new adversarial mode on Visual Studio and MonoGame platform.
- Applying abundant design patterns and OOP skills and rule-based AI.

Honors & Awards

Dean's List of Distinguished Students All Semesters
The Ohio State University

First Prize of College Internet Innovation Contest June 2017
Xiamen University, Fujian Province

College Calculus Contest third prize May 2016
Xiamen University, Fujian Province

College Scholarship May 2016
Xiamen University

College Academic Scholarship May 2016
School of Information Science, Xiamen University

Skills

Programming languages
Familiar with C, Python, Matlab, C#; Have knowledge in Java, JavaScript

Programming Tools
Pytorch, TensorFlow, Linux, Parallel Computing (CUDA), Azure DevOps ,OpenGL, WebGL

English Proficiency
TOEFL 107 (R:27, L:27, S:26, W:27)
GRE: V 157, Q 169