WEIWEI GU

Email: weiweigu@asu.edu

EDUCATIONAL BACKGROUND

Arizona State University, Ph.D. in Computer Science

Sept. 2022-May.2027(expected)

Advisor: Prof. Nakul Gopalan Cumulative GPA: **4.0/4.0**

University of Rochester, M.S. in Computer Science

Sept.2020-May.2022

Cumulative GPA: 4.0/4.0

Bucknell University B.S. in Computer Science, B.A. in Mathematics

Sept.2016-Jun.2020

PUBLICATION

Weiwei Gu, Anant Sah, and Nakul Gopalan, "Learning Generalizable Visual Task Through Interaction", Accepted by 2nd Workshop on Language and Robot Learning: Language as Grounding of 2023 Conference on Robot Learning (LangRob at CoRL 2023).

Weiwei Gu, Boyuan Zheng, Yunmo Chen, Tongfei Chen, and Benjamin Van Durme, "An Empirical Study on Finding Spans", Accepted by *The 2022 Conference on Empirical Methods in Natural Language Processing (EMNLP 2022)*.

Yunmo Chen, William Gantt, Weiwei Gu, Tongfei Chen, Aaron White, and Benjamin Van Durme, "Iterative Document-level Information Extraction via Imitation Learning", Outstanding Paper Award in The 17th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2023).

RESEARCH EXPERIENCE

Interactive Visual Task Learning for Robots

Oct.2022-Aug.2023

Supervised by Prof. Nakul Gopalan

Objective: Develop a neuro-symbolic based method that enables robots to learn novel visual tasks and concepts from natural interactions with human users. Conduct user study to show that non-expert human users are able to teach robot tasks using our system.

Core Contents:

- Develop a method to enable robot to learn novel visual tasks and visual concepts from natural interactions.
- Conduct human subject experiment to show that non-expert users are able to teach robots with our system.
- Present a visual concept learning model that achieves SoTA performance on VQA task.

Span Finding Survey

 $Feb. 2022\hbox{-} Jun. 2022$

 $Supervised\ by\ Prof.\ Aaron\ White \ |\ Cooperated\ with\ Johns\ Hopkins\ University$

Objective: Study the effect of the three major span finding methods (Tagging, Boundary Prediction, and Span Enumeration) on downstream information extraction tasks such as Named Entity Recognition, Relation Extraction, Event Extraction, Coreference Resolution, and Question Answering.

Core Contents:

- Implement models for the three major span finding methods;
- Conduct experiments on Named Entity Recognition Relation Extraction, and Event Extraction task.

Better Extraction from Text Towards Enhanced Retrieval (BETTER)

Aug. 2021-Jun. 2022

Supervised by Prof. Aaron White | Cooperated with Johns Hopkins University

Objective: Leverage entity and event identification, text search, and human-in-the-loop computation to create technologies that enable analysts to extract and retrieve highly-detailed, personalized knowledge across diverse domains and languages.

Core Contents:

- Run experiment on different combination of parameters to select the model with best performance;
- Be going to move to the Phase 2 (Granular IE Section) and develop the Granular model.

TECHNICAL SKILLS

Programming Languages Miscellaneous Python, C/C++, Java, R, MATLAB, MySQL LATEX, PyTorch, NumPy, Git, Vim, AllenNLP