

XIAOHAN ZOU

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EDUCATION

Boston University	Boston, MA, USA
M.S. in Computer Science	09/2021 – 01/2023
Tongji University	Shanghai, China
B.Eng. in Software Engineering	09/2016 – 07/2020

PUBLICATIONS AND SUBMITTED MANUSCRIPTS

- **Xiaohan Zou**, Changqiao Wu, Lele Cheng, and Zhongyuan Wang. "Rethinking Fine-grained Semantic Alignment in Video-Text Retrieval", **submitted to IJCAI 2022**.
- **Xiaohan Zou**, Cheng Lin, Yinjia Zhang, and Qinpei Zhao. "To be an Artist: Automatic Generation on Food Image Aesthetic Captioning", **ICTAI 2020**. (Acceptance Rate: 25%, **Oral Presentation**) [\[Paper\]](#) [\[Code\]](#)
- **Xiaohan Zou**. "A Survey on Application of Knowledge Graph", **CCEAI 2020**. [\[Paper\]](#)

PROFESSIONAL EXPERIENCE

Machine Learning Engineer Intern , Kuaishou Technology, Beijing, China	07/2021 – Present
<ul style="list-style-type: none">◦ Devised a new model-agnostic formulation for fine-grained cross-modal semantic alignment and subsumed the recent popular works into the proposed scheme◦ Proposed a video-text retrieval method which is competitive when compared with the SOTA approaches with heavy model design by only altering the similarity function, submitted to IJCAI 2021◦ Developed a PyTorch library for video-text retrieval which is benefiting the group members' research work	

PROJECTS

Product Description Generation , Champion of Deecamp 2021 Language Track	06/2021 – 08/2021
<ul style="list-style-type: none">◦ Incorporated product attributes, personalized information and external knowledge to T5 pre-trained model using transformer and bidirectional attention to generate interesting and informative product descriptions◦ Built the frontend of a fancy cross-platform website for interacting with our model using Vue and uni-app	
Food Image Aesthetic Captioning , Tongji University, Project Page	04/2020 – 06/2020
<ul style="list-style-type: none">◦ Proposed a novel framework consisting of a single-attribute captioning module and an unsupervised text summarization module for generating aesthetic captions for food images, published in ICTAI 2020◦ Designed a data filtering strategy inspired by TF-IDF method for building a dataset for this new task◦ Designed two new evaluation criteria to assess the novelty and diversity of the generated captions◦ Outperformed baselines and existed methods substantially in terms of diversity, novelty and coherence	
Semi-Supervised Machine Translation , Peking University	07/2018 – 08/2018
<ul style="list-style-type: none">◦ Utilized the structure duality to boost the learning of two dual tasks based on shared hidden space◦ Designed two denoising auto-encoders consisting of encoders and decoders of two traditional Seq2Seq neural machine translators to make use of unpaired data◦ Outperformed strong baselines by 1.0 - 2.9 BLEU on IWSLT'15 and WMT'14 dataset	

AWARDS AND HONORS

Bronze , China Collegiate Programming Contest (CCPC)	2018
Second Prize , China Mathematical Contest in Modeling (CUMCM)	2017, 2018

SKILLS

Programming Languages: Python, JavaScript/TypeScript, HTML/CSS, Java, C/C++, MATLAB
Tools and Frameworks: Git, PyTorch, Keras, scikit-learn, Linux, Vue, React, Django, \LaTeX
Languages: Chinese (native), English (proficient, TOEFL: 106, GRE: 322)