Xiaohan Zou

(+86) 183-2196-8867 | xiaohan.zou@foxmail.com | github.com/Renovamen | zxh.io

Education

Boston University, Massachusetts, USA   09/2021 – 06/2023 (Expected)
M.S. in Computer Science

Tongji University, Shanghai, China   09/2016 – 07/2020
B.Eng in Software Engineering

Publications and Submitted Manuscripts

- **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]

Projects

Food Image Aesthetic Captioning, Tongji University, Link   04/2020 – 06/2020
- 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**
- 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

Fault Diagnosis for Microservice Architectures, Tongji University   09/2018 – 01/2019
- Represented the microservices of a cloud platform and the causal relationships between them by a Bayesion network against the observed performance metrics dynamically using PC algorithm
- Identified the culprit microservices when an anomaly occured using random walk
- Outperformed traditional approaches with 6.56% accuracy improvement, without knowing the calling graph

Semi-Supervised Machine Translation, Peking University   07/2018 – 08/2018
- 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

Professional Experience

Software Engineer Intern, Acoustic-Optic-Electronic Co., LTD. of China Electronics Technology
Group Corporation, Chongqing, China   10/2020 – 06/2021
- Involved in building a security visualization system for Sanxingdui using Cesium and Vue, responsible for displaying 3D models and visualizing sensor data
- Wrote scripts to label ancient handwritten characters and generate OCR training files automatically

Game Engineer Intern, Banana Interactive, Shanghai, China   10/2019 – 05/2020
- Participated in the development, updating and testing of 3 H5 games using JavaScript and Construct 3
- Ported a game packaging and deployment tool from Windows to Linux and macOS

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, HTML/CSS, C/C++, Java, MATLAB
Tools and Frameworks: Git, PyTorch, Keras, Linux, Vue, React, Django, LaTeX
Languages: Chinese (native), English (proficient, TOEFL: 106, GRE: 322)