## WANG Hao

Email: hao005@e.ntu.edu.sg Homepage: https://wanghao.tech/

Research interests: Cross-Modal Translation

### ACADEMIC QUALIFICATIONS

## Nanyang Technological University (NTU)

Singapore

PhD Candidate in SCSE

Aug 2019 - Present

o Advisors: Miao Chun Yan, Guosheng Lin, Steven Hoi

### Huazhong University of Science and Technology (HUST)

Wuhan, China

Bachelor of Automation (Outstanding Graduate)

Sept 2014 - Jun 2018

#### PREPRINTS

- Cross-Modal Graph with Meta Concepts for Video Captioning:
  - o Hao Wang, Guosheng Lin, Steven Hoi, Chunyan Miao.
- Learning Structural Representations for Recipe Generation and Food Retrieval:
  - o Hao Wang, Guosheng Lin, Steven Hoi, Chunyan Miao.
  - Submit to TPAMI.
- Decomposing Generation Networks with Structure Prediction for Recipe Generation:
  - o Hao Wang, Guosheng Lin, Steven Hoi, Chunyan Miao.
  - Submit to PR.

### **Publications**

- Cross-Modal Food Retrieval: Learning a Joint Embedding of Food Images and Recipes with Semantic Consistency and Attention Mechanism:
  - Hao Wang, Doyen Sahoo, Chenghao Liu, Shu Ke, Palakorn Achananuparp, Ee-peng Lim, Steven Hoi.
  - Accepted at IEEE Transactions on Multimedia.
- Structure-Aware Generation Network for Recipe Generation from Images:
  - o Hao Wang, Guosheng Lin, Steven Hoi, Chunyan Miao.
  - Accepted at ECCV 2020.
- SpSequenceNet: Semantic Segmentation Network on 4D Point Clouds:
  - o Hanyu Shi, Guosheng Lin, **Hao Wang**, Tzu-Yi Hung, Zhenhua Wang.
  - Accepted at CVPR 2020.
- FoodAI: Food Image Recognition via Deep Learning for Smart Food Logging:
  - o Doyen Sahoo, **Wang Hao**, Shu Ke, Xiongwei Wu, Hung Le, Palakorn Achananuparp, Ee-Peng Lim, Steven Hoi.
  - Accepted at KDD 2019.
- Learning Cross-Modal Embeddings with Adversarial Networks for Cooking Recipes and Food Images:
  - o Hao Wang, Doyen Sahoo, Chenghao Liu, Ee-peng Lim, Steven Hoi.
  - Accepted at CVPR 2019.

## Living Analytics Research Centre (LARC)

SMU, Singapore

Research Engineer

Aug 2018 - Aug 2019

• Involved in FoodAI project, which applies food recognition into daily life with app **Healthy 365**.

Mainly took charge of model training.

- Researched on cross-modal retrieval in food domain, introducing modality alignment to food retrieval.
- o Advisor: Steven Hoi

### Horizon Robotics Inc.

Beijing, China

Jan 2018 - May 2018

 $Algorithm\ Intern$ 

- Researched on video face recognition.
- Utilized deep learning to analyze the quality of each frame, which is used to obtain video representations by weighted averaging.
- o Advisors: Ming Yang, Zhizhong Su

# National Laboratory of Pattern Recognition, CASIA

Beijing, China

Jul 2017 - Sept 2017

- Researched on data cleansing methods based on neural networks.
- Trained classifiers obtained from noisy label datasets with robust performance.
- o Advisors: Stan Z. Li, Jun Wan