

# Tianyou Liang

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## EDUCATION

<b>School of Computer</b>	<b>Guangdong University of Technology</b>	<b>Sept. 2019 – June 2022</b>
M.Sc., Computer Science and Technology	Supervisor: A/P Min Meng	<b>Guangzhou</b>
• GPA: 86.9/100		
• First Grade Scholarship, Guangdong University of Technology (10%)		<b>Sept. 2020</b>
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<b>School of Computer</b>	<b>Guangdong University of Technology</b>	<b>Sept. 2015 – June 2019</b>
B.Sc., Computer Science and Technology		<b>Guangzhou</b>
• GPA: 86.7/100		
• Outstanding Graduation Student of Guangdong University of Technology		

## RESEARCH EXPERIENCE

<b>Guangdong University of Technology</b>	<b>2019 – Now</b>
<i>1. Mining the Statistical Correspondence between Unpaired Data for Incomplete Multi-View Clustering</i>	
<ul style="list-style-type: none"><li>• Drew a new insight from data pattern in two-view scenario, providing a new perspective on leveraging the unpaired data for cross-view consistency exploration in incomplete multi-view clustering task.</li><li>• Formulated the mined cross-view statistical correspondence in form of mutual information based on an introduced assumption, which can be used as a generally applicable training objective.</li><li>• Performed augmentation upon two base models and conducted experiments and analyses on two widely used datasets to validate both the efficacy of the mined correspondence and the generality of the derived objective.</li></ul>	
<i>2. Cross-class Similarity Aware Cross-modal Hashing</i>	
<ul style="list-style-type: none"><li>• Point out the deficiency of existing similarity measure in modeling the relationship between classes, especially under multi-label scenario, and introduced a flexible taxonomy-based data similarity measurement that can take such relationship into consideration, and can suit multi-label data and label hierarchy in arbitrary structure.</li><li>• Build label hierarchy for two datasets based on WordNet.</li><li>• Proposed a novel ranking alignment objective to utilize the adjusted data similarities, while tackling the pair-similarity imbalance problem.</li></ul>	
<i>3. Cross-modal Retrieval Oriented Visual Semantic Embedding Network (undergraduate thesis)</i>	
<ul style="list-style-type: none"><li>• Developed a cross-modal hashing model based on auto-encoder architecture.</li><li>• The encoder is splitted into two parts to disentangle the semantic and redundant information in image modality.</li></ul>	

## SELECTED HONORS

Top-4 of Code Craft 2020 (Guangdong, Hong Kong and Macau Site), Huawei	<b>June 2020</b>
Bronze medal of The ACM-ICPC Asia Reginal Contest (Qingdao Site)	<b>Nov. 2017</b>
Bronze medal of The ACM-ICPC Asia Reginal Contest (Shenyang Site)	<b>Oct. 2017</b>
Silver medal of China Collegiate Programming Contest - National Invitational Contest (Hunan)	<b>May 2017</b>

## SKILLS

- Proficiency in English listening, speaking and writing
- Skilled in reading and writing academic papers
- Excellent programming skills in Python, MATLAB, C/C++

## PUBLICATIONS

- [1] **T. Liang**, M. Meng, H. Wang, J. Yu, and J. Wu. "Cross-class Similarity Aware Cross-modal Hashing." submitted to ICDE 2022 (under review)
- [2] **T. Liang**, M. Meng, M. Lan, J. Yu, and J. Wu. "Mining the Statistical Correspondence between Unpaired Data for Incomplete Multi-View Clustering." submitted to AAAI 2022 (under review)
- [3] J. Xie, J Wu, **T. Liang** and M. Meng. "Stack-VAE network for Zero-Shot Learning." *International Conference on Neural Information Processing*. (accepted, forthcoming)
- [4] Z. Wu, M. Meng, **T. Liang** and J. Wu. "Exploring Fined-grained Cluster Structures for Unsupervised Domain Adaptation." (to be submitted)
- [5] Z. Wu, M. Meng, **T. Liang** and J. Wu. "Joint Domain-level Class-Level and Structure-Level Alignment for Multiple Source and Target Domain Adaptation." (to be submitted)