Congcong Jin

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Education

University of California, Irvine **09/2019 – 12/2020 (Expected)**

M.S. in Computer Science, Donald Bren School of Information and Computer Sciences

Rochester Institute of Technology **09/2018 – 11/2018**

Visiting Student, B. Thomas Golisano College of Computing & Information Sciences

Xi'an Jiaotong University **09/2016 – 06/2019**

M.S. in Software Engineering, School of Software

Technical Skills

- **Programming Languages:** Java, Python, C/C++, MATLAB, JavaScript, HTML
- **Operating Systems:** Mac, Linux and Windows

Project Experiences

Customer Relationship Management System **04/2014**

- Developed a Customer Relationship Management system to manage information of both users and transactions
- Applied techniques like Apache Tomcat, Servlet, JavaScript, HTML and MySQL

Library Information Management System **12/2013**

- Developed an information system to manage book information
- Applied techniques like MySQL, JavaScript, HTML and et al.

Research Experiences

Few-shot Human Action Prediction **09/2018 – 11/2018**

- Introduced few-shot learning into action prediction to improve the network's generalization
- Proposed relationship networks to construct a confidence matrix for accurate classification
- Designed a non-decreasing margin based triplet loss to enforce the model to make early predictions

Multi-view Point Cloud Registration **05/2017 – 03/2018**

- Proposed a matrix completion method to reduce the sparsity of the reconstructed matrix
- Designed a probability function for relative motions to denotes their reliabilities
- Applied the proposed matrix completion and probability function into multi-view registration based on L_1 norm

Pair-wise Point Cloud Registration **09/2016 - 04/2017**

- Introduced hard assignment into registration to exclude outliers for registration
- Designed a probability function to represent the reliabilities of established correspondences
- Proposed an Iterative Closest Point variant to acquire the rigid transformation between two point clouds

Internship

Action Recognition and Pose Estimation

CVTE Co., Ltd *02/2019 – 05/2019*

- Collected and rinsed classroom data and then cut each student in the video out for classification
- Applied optical flow theory to differentiate the transition between different poses
- Improved existing networks and trained them using the collected data for pose recognition
- Introduced people detection and tracking theories to analyze each student's pose

Publications

- **Congcong Jin**, Jihua Zhu, Yaochen Li and et al. Multi-view Registration Based on Weighted Low Rank and Sparse Matrix Decomposition of Motions. IET Computer Vision, 13 (2019): 376–384.
- Jihua Zhu, **Congcong Jin**, Zutao Jiang and et al. Robust Point Cloud Registration Based on Both Hard and Soft Assignments. Optics & Laser Technology, 110: 202–208.
- Yiqiong Zhou, Siyu Xu, **Congcong Jin**, Ziyi Guo. Multiple Point Sets Registration Based on Expectation Maximization Algorithm. Computers and Electrical Engineering, 70 (2018): 1–11.
- Zutao Jiang, Jihua Zhu, **Congcong Jin**, Siyu Xu and et al. Simultaneously Merging Multi-robot Grid Maps at Different Resolutions. Multimedia Tools and Applications, 2019: 1–20.
- Jihua Zhu, Di Wang, Xiuxiu Bai, Huimin Lu, **Congcong Jin** and Zhongyu Li. Registration of Point Clouds Based on the Ratio of Bidirectional Distances, International Conference on 3D Vision, pp. 102–107.

Awards

- Scholar Exchange Fellowship, *Xi'an Jiaotong University (1/600+)* *09/2018 – 11/2018*
- Shenzhen Stock Exchange Scholarship, *Xi'an Jiaotong University (1/216)* *10/2018*
- Special Scholarship, *Xi'an Jiaotong University* *10/2018*
- Second Prize Scholarship, *Xi'an Jiaotong University* *10/2017*
- First Prize Scholarship, *Xi'an Jiaotong University* *10/2016*
- Yueqi Sun Outstanding Student Award, *Shandong University of Science & Technology* *10/2014*
- Second Prize of National English Contest for College Students, *China* *05/2014*
- National Encouragement Scholarship (Twice), *China* *2012 – 2013*