Congcong (Rachel) Jin

(949)561-2143 • congcoj@uci.edu • https://lolacc.github.io/

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 (Ranking: 2/95)

Technical Skills

- **Programming Languages:** Java, C/C++, Python, MATLAB, JavaScript and HTML
- **Operating Systems:** Linux, Mac and Windows
- **Deep Learning Framework:** PyTorch, TensorFlow, MXNet

Project Experiences

Customer Relationship Management System (Team Leader) **04/2014**

- Developed a system to efficiently manage information of personnel, transactions and commodities
- Techniques employed: Browser/Server development mode, Tomcat, Java Database Connectivity (JDBC), MySQL, Servlet, JavaScript and HTML

Library Information Management System (Team Leader) **12/2013**

- Implemented a system to manage information of readers, books, book borrowing and users
- Techniques applied: JavaScript, JQuery, MySQL, Model, View and Controller architecture, JDBC and et al.

Research Experiences

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

Introduced few-shot learning into action prediction; proposed relationship networks for accurate classification; designed a non-decreasing margin based triplet loss to make early predictions

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

Proposed a matrix completion method to provide informative knowledge; designed a probability function for relative motions; improved multi-view registration based on L_1 norm and matrix decomposition

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

Introduced hard assignment into registration to exclude outliers; designed a probability function for established correspondences; proposed an Iterative Closest Point variant to acquire the rigid transformation

Internship

Action Recognition and Pose Estimation for Classroom Students

CVTE Co., Ltd *02/2019 – 05/2019*

- Applied optical flow theory to differentiate the transition between different actions
- Improved and boosted existing networks and trained them for pose recognition
- Introduced people detection and tracking theories to analyze each student's poses

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 et al. Registration of Point Clouds Based on the Ratio of Bidirectional Distances, International Conference on 3D Vision, pp. 102–107.