

Shuai Li

CONTACT INFORMATION

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EDUCATION

Beijing Institute of Technology, Beijing, China

M.E., Automation, September, 2014 - March, 2017

Southwest Jiaotong University, Chengdu, China

B.E., Electrical Engineering, September, 2010 - June, 2014

PUBLICATIONS

S.Li, B.Wang, R.Dong, Z.Zhou, S.Li. A Novel Smoke Detection Algorithm Based on Fast Self-Tuning Back- ground Subtraction In 28-th Chinese Conference and Decision Control Conference, Yinchuan, 2016

R. Dong, B.Wang, **S.Li**, Z.Zhou, Z.Wang. Interactive Image Segmentation with Color and Texture Information by Region Merging In 28-th Chinese Conference and Decision Control Conference, Yinchuan, 2016

PREPRINT

Shuai Li. Hamid Rezatofighi. Multi-Person Tracking using Graph Attention Networks.

RESEARCH EXPERIENCE

Research Assistant, Arizona State University, Tempe, USA

Research Assistant at Active Perception Group

January, 2018 - May, 2019

Worked on various Computer Vision combined with Civil Engineering projects, including water leakage detection in Arizona canal satellite images, temporal driver fatigue analysis in videos, video data collection for construction workers and multi-person tracking in constrained surveillance videos using Kalman Filter.

Visiting Student, University of Adelaide, Adelaide, Australia

Research Assistant

May, 2019 - April, 2020

Working with Prof Chunhua Shen and Dr Hamid Rezatofighi on multi-person tracking. Using Minimum-Cost Network Flow formulation combined with Graph Neural Networks to achieve state-of-the-art performance on MOT16, MOT17 benchmarks utilizing public provided detections. Also worked on multi-person tracking and segmentation and crowd counting problems.

Ph.D Student, Rochester Institute of Technology, Rochester, USA (Enrolled remotely)

Research Assistant

September, 2021 - Present

Working with Dr Yu Kong in ACTION Lab on de-biasing image captioning systems. But may drop-out this year due to PP10043 that restricts F1 visa application.

TEACHING EXPERIENCE

Teaching Assistant, Introduction to C++ Programming, Arizona State University. **Spring 2018**

Teaching Assistant, Foundations of Robotics, Arizona State University

Fall 2018

Teaching Assistant, Assembling Language, Arizona State University

Spring 2019

INTERNSHIP

Computer Vision Algorithm Engineer, AiBee Corporation, Beijing

Tracking and Re-Identification Group

May, 2020 - August, 2020

Worked on multi-view multi-person tracking in indoor surveillance scenarios. Clustered person tracks in advance followed by merging/splitting of tracks using a learned binary classification network. Also proposed some new metrics for tracking.

Computer Vision Algorithm Engineer, DeepCare, Beijing

Pathology Cell Detection Group

March, 2017 - May, 2017

Trained a SSD(Single-Shot Detector) based pathological cell detection model using data collected from hospital in a data-driven manner. Combined a overlapping sliding window and NMS for Pathological Counting and evaluated the performance using PR-Curve for further segmentation.

COURSES

Signal Processing, Probability, Linear Algebra, Stochastic Process Theory, Numerical Analysis, Statistical Machine Learning, Natural Language Processing, Perception in Robotics, Foundation of Algorithm.

SKILLS

- Programming Languages: Python, C++.
- Tools: OpenCV, ROS, Matlab, PyTorch, TensorFlow.
- Operating Systems: Unix/Linux.