

RUIZE HAN

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🎓 EDUCATION

Tianjin University (TJU), Tian Jin, China 2019 -- Present

Ph.D student in Computer Application Technology

Tianjin University (TJU), Tian Jin, China 2016 -- 2019

M.Eng. in Computer Technology Engineering

Hebei University of Technology, Tianjin, China 2012 -- 2016

B.S. in Mathematics and Applied Mathematics

🏛️ RESEARCH PROJECTS

Multi-Camera Video Analysis Jan. 2019 -- Present

- › Associate and track multiple humans between the top bird's eye view and horizontal egocentric view.
- › Detect the co-interest person (CIP) via the human visual attention using complementary-view cameras.
- › Detect and recognize the human-human interactions under crowded scene using graph neural network.

Visual Object Tracking Jul. 2017 -- Present

- › Design the dynamic/selective content-aware regularization in spatial-temporal domain for correlation filter (CF) based visual object tracking.
- › Propose a new weighting sample based approach for CF tracking to alleviate the boundary effects.

Visual Positioning & Precision Measurement Sep. 2016 -- Jul. 2017

- › Inspect the fine-grained change of cultural relics under real-world hosting environments via visual positioning and precision measurement.
- › Active recurrence of lighting condition for fine-grained change detection.

📖 PUBLICATIONS

- **Ruize Han**, Wei Feng, Song Wang. Fast Learning of Spatially Regularized and Content Aware Correlation Filter for Visual Tracking, to appear in **IEEE TIP**, 2020.
- Haibo Li, Liqing Gao, **Ruize Han**, Liang Wan, Wei Feng. Key Action and Joint CTC-Attention based Sign Language Recognition, in **ICASSP**, 2020.
- Qing Guo, **Ruize Han**, Wei Feng, Zhihao Chen, Liang Wan. Selective Spatial Regularization by Reinforcement Learned Decision Making for Object Tracking, **IEEE TIP**, 2020.
- **Ruize Han**, Wei Feng, Jiewen Zhao, Zicheng Niu, Yujun Zhang, Liang Wan, Song Wang. Complementary-View Multiple Human Tracking, in **AAAI** 2020.
- Kuan Li, Yi Jin, Muhammad Waqar Akram, **Ruize Han**, Jiongwei Chen. Facial expression recognition with convolutional neural networks via a new face cropping and rotation strategy. *The Visual Computer*, 2020.
- Wei Feng*, **Ruize Han***, Qing Guo, Jianke Zhu, Song Wang. Dynamic Saliency-Aware Regularization for Correlation Filter-Based Object Tracking, **IEEE TIP**, 2019. (*Joint First Author*)
- **Ruize Han**, Qing Guo, Wei Feng. Content-Related Spatial Regularization for Visual Object Tracking, in **ICME**, 2018. (*Best Paper Award*)
- Qian Zhang, Fei-Peng Tian, **Ruize Han**, Wei Feng. Near-Surface Lighting Estimation and Reconstruction, in **ICME**, 2017.
- **Ruize Han**, Yujun Zhang, Wei Feng, Jiewen Zhao, Liang Wan, Song Wang. Multiple Human Association between Top and Horizontal Views via Spatial Distributions. In arXiv 2020.

HONORS AND AWARDS

National Graduate Scholarship	2018
ICME Best Paper Award	2018
Excellent Dissertation of Hebei University of Technology	2016
National Encouragement Scholarship	2015

ACADEMIC SERVICES

- Reviewer of conference: IJCAI-20, ICIP-18
- Reviewer of journal: Neurocomputing, Pattern Recognition Letters, Electronic Letters

MISCELLANEOUS

- Interests: Badminton, Board Game
- Programming Languages: MATLAB > Python > C++
- Languages: English (CET-6)