XUEJIAN RONG

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EDUCATION

2013-present   The City College, City University of New York (CUNY)

Ph.D. Candidate in Electrical Engineering   Expected August 2018
Advisor: Professor Yingli Tian
Research Focus: Machine Learning & Computer Vision

2009-2013   Nanjing University of Aeronautics and Astronautics

B.E. in Control Science and Engineering   Outstanding Undergraduate Thesis Award

SELECTED PUBLICATIONS

X. Rong, C. Yi, and Y. Tian. *Unambiguous Text Localization and Retrieval for Cluttered Scenes*. IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2017. (Spotlight Presentation)

Y. Xian, **X. Rong**, X. Yang, and Y. Tian. *Evaluation of Low-Level Features for Real-World Surveillance Event Detection*. IEEE Transactions on Circuits and Systems for Video Technology (**TCSVT**), 2017.

X. Rong, B. Li, A. Arditi, and Y. Tian. *Guided Text Spotting for Assistive Blind Navigation in Unfamiliar Environments*. International Symposium on Visual Computing (**ISVC**), 2016. (Oral Presentation)

X. Rong and Y. Tian. *Adaptive Shrinkage Cascades for Blind Image Deconvolution*. IEEE International Conference on Digital Signal Processing (**DSP**), 2016. (Oral Presentation)

Y. Ye, **X. Rong**, X. Yang, and Y. Tian. *Region Trajectories for Video Semantic Concept Detection*. ACM International Conference on Multimedia Retrieval (**ICMR**), 2016.

J. Munoz, B. Li, **X. Rong**, J. Xiao, Y. Tian, A. Arditi. *Demo: Assisting Visually Impaired People Navigate Indoors*. The 25th International Joint Conference on Artificial Intelligence (**IJCAI**), 2016.

B. Li, X. Zhang, J. P. Munoz, J. Xiao, **X. Rong**, and Y. Tian. *Assisting Blind People to Avoid Obstacles: An Wearable Obstacle Stereo Feedback System based on 3D Detection*. IEEE International Conference on Robotics and Biomimetics (**ROBIO**), 2015.

X. Rong, C. Yi, X. Yang, and Y. Tian. *Scene Text Recognition in Multiple Frames based on Text Tracking*. IEEE International Conference on Multimedia and Expo (**ICME**), 2014.

X. Rong, C. Yi, Y. Tian. *Recognizing Text-based Traffic Guide Panels with Cascaded Localization Network*. ECCV Workshop on Computer Vision for Road Scene Understanding and Autonomous Driving (**CVRSUAD**), 2016.

B. Li, J. Munoz, **X. Rong**, J. Xiao, Y. Tian, A. Arditi. *ISANA: Wearable Context-Aware Indoor Assistive Navigation with Obstacle Avoidance for the Blind*. ECCV Workshop on Assistive Computer Vision and Robotics (**ACVR**), 2016.

PROJECTS & EXPERIENCE

2013-Present   Scene Text Detection and Recognition in Natural Images

Design new deep learning based inference algorithms for scene text detection and recognition in the wild, in the presence of image degradations like blur, distortion, noise, cluttered background, etc. Recognized

texts in indoor environments usually carries important contextual information which could significantly assist the independent travel of blind or visually impaired persons.

2014-2016   Intelligent Navigation Aid for Visually Impaired Persons

Design new image deblurring algorithm to remove the degradations in captured indoor videos, then use the clear output videos to do real-time indoor navigation for blind people.

2013-2015   Destination Recognition for Visually Impaired Persons

Design new image deblurring algorithm to remove the degradations in captured indoor videos, then use the clear output videos to do automatic target/destinations recognition for the guidance of blind people.

2012-2013   Microsoft Kinect based 3D Object Recognition for Remote Operation

Designed rendering algorithms to control the Haptic Interaction Point (HIP) to interact with virtual environment created by the depth image from Kinect(Microsoft Corp.)

ACADEMIC HONORS

2016   Travel Award of IEEE ICME 2016

Won travel award and NSF student support for the IEEE International Conference on Multimedia and Expo (ICME) 2016.

2013-2014   Awarded the GSOE Graduate Fellowship from CCNY

2009-2012   First Class Academic Scholarship

For top 15% students in the whole department.

SKILLS

Programming Languages   C, C++, Matlab, Python, and Shell with practical experiences

Platforms and Tools   Visual Studio, Android Studio, PyCharm, Electron, LaTeX, GNU Linux

PROFESSIONAL ACTIVITIES

Reviewer   CVPR, ICCV, BMVC, ICIP, ICME, TMM, TIP, MVA, JVCI, etc.