Xiangyu Chen

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RESEARCH INTEREST

Computer Vision, Deep Learning, Few-Shot Learning

EDUCATION

Ph.D. candidate in Electrical Engineering   **Aug. 2019 - present**
University of Kansas, U.S. (GPA: **4.0**/4.0)
Advidor: Prof. Guanghui Wang and Prof. Cuncong Zhong

M.Eng. in Signal and Information Processing   **Sep. 2015 - June 2018**
Southeast University, China (exemption for the postgraduate qualification exam)
Advisor: Prof. Yili Xia and Prof. Wenjiang Pei

B.Eng. in Electronic and Information Engineering   **Sep. 2011 - June 2015**
Nanjing University of Science and Technology, China

PUBLICATIONS

- Usman Sajid, **Xiangyu Chen**, Hasan Sajid, Taejoon Kim and Guanghui Wang. "Audio-Visual Transformer Based Crowd Counting. " *IEEE/CVF International Conference on Computer Vision Workshops (ICCVW), 2021*. (**oral**)
- **Xiangyu Chen** and Guanghui Wang. "Few-Shot Learning by Integrating Spatial and Frequency Representation." *The Conference on Robots and Vision (CRV), 2021.* (**oral**)
- **Xiangyu Chen** and Andrew B. Williams. "Improving Engagement by Letting Social Robots Learn and Call Your Name." *Companion of the 2020 ACM/IEEE International Conference on Human-Robot Interaction. 2020.*
- Zhe Li, **Xiangyu Chen**, Wei Deng, Wenjiang Pei and Yili Xia, "Using RFID Technology to Introduce Properties of LMS," *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2019, pp. 7873-7877, doi: 10.1109/ICASSP.2019.8683764.* (**oral**, **Education Innovation Award**)

PATENTS

- Yili Xia, **Xiangyu Chen**, Kai Wang, Wenjiang Pei. "The estimation method of frequency based on widely linear MVDR spectrum in unbalanced power system", Chinese Patent 201710307246.7, May 4, 2017.
- **Xiangyu Chen** and Yifan Zhang. "A method for redetecting target lost in target tracking", Chinese Patent 201811231109.0, Oct. 22, 2018.

EMPLOYMENT EXPERIENCE

Research Assistanship at KU   **Jan. 2021 - present**
Teaching Assistanship at KU (EECS 168/169, C++)   **Fall 2019, Spring 2020, Fall 2020**
- Perform assistant teaching duties, including leading the lab, grading and providing office hours.
- Instructor: Prof. John Gibbons

Algorithm Engineer at AIRIA (Internship)   **Jul. 2018 - Jul. 2019**
- Wrote demos for pedestrian detection, pedestrian tracking and lane detection.
- Wrote demo for object detection on Android phones.
- Tested inference time of optimized deep learning frameworks for mobile platform, including MACE, tenforflow lite and NCNN.
- Wrote 4 Chinese patents related to computer vision.
- Mentor: Dr. Qinghao Hu

SDET at Meituan-Dianping (Internship)   **Dec. 2016 - Feb. 2017**
- Worked as a SDET for testing the Marriage module on client.
- Mentor: Yongjun Xu and Xinyue Li

Product Accreditor at Baidu (Internship)   **May 2014 - Jul. 2014**
- Assessed the relevance between website resources and queries, and evaluated the web page quality according to the web content manually.

PROJECT EXPERIENCE

Unmanned Aerial Vehicle Project   **Jul. 2018 - Jul. 2019**
- Helped to build a pedestrian detection and tracking system using C++.
- Mentor: Dr. Qinghao Hu

Application of Signal Processing   **Dec. 2016 - Apr. 2018**
- Proposed a novel high-performance real-time algorithm to estimate WL MVDR spectrum, and then used it to estimate the system frequency in electricity system.
- Advisor: Prof. Yili Xia

SELECTED AWARDS & HONORS

- **Excellent Graduate**, Southeast University, 2018
- **Excellent Master Student**, Southeast University, 2017
- **Second Prize,** National Postgraduate Mathematical Modeling Contest, team leader, 2016
- **Excellent Graduate,** Nanjing University of Science and Technology, 2015
- **Excellent Undergraduate Student,** Nanjing University of Science and Technology, 2012
- **First Prize,** Electronics Design Contest in Jiangsu Province, team leader, 2014
- **Excellent Volunteer,** Asian Youth Games, 2013
- **Scholarship, every year,** 2011-2018