YIRAN XU

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EDUCATION BACKGROUND

Ph.D. in Computer Engineering Aug. 2020 - Present
Virginia Tech, Blacksburg, VA, USA **GPA: 4.00/4.00**
M.S. in Electrical and Computer Engineering Sept. 2018 - June. 2020
University of California, San Diego, CA, USA **GPA: 3.75/4.00**
B.E. in Electrical Engineering Sept. 2014 - Jun. 2018
South China University of Technology (SCUT), Guangzhou, China **GPA: 3.81/4.00**

PUBLICATIONS

Yiran Xu, Xiaoyin Yang, Lihang Gong, Hsuan-chu Lin, Tz-ying Wu, Yunsheng Li, Nuno Vasconcelos. *Explainable Object-induced Action Decision for Autonomous Vehicles*, CVPR 2020.

RESEARCH EXPERIENCES

Research Assistant, Virginia Tech, VA, USA Sept. 2020 - Present
GAN Inversion for Videos (ongoing)
Advisor: Jia-Bin Huang

- Reconstructed videos by reconstructing foreground and background respectively.
- Edited the foreground object in the videos.

Research Assistant, UC San Diego, CA, USA May. 2020 - Present
Monocular 3D Object Detection with Radar Data (ongoing)
Advisor: Nuno Vasconcelos

- Implemented Deep3DBox as a baseline for 3D object detection on KITTI.
- Embedded Radar data from NuScenes as correction to mitigate the ambiguity in monocular 3D detection.

Research Assistant, UC San Diego, CA, USA Mar. 2019 - Nov. 2019
Explainable Action Decision in Self-Driving
Advisor: Nuno Vasconcelos

- Collected data from different Self-Driving datasets and annotated them with action and explanation. Proposed a new Self-Driving task and new dataset BDD-OIA.
- Proposed an object-centric network for action decision and explanation.
- Accepeted as a CVPR2020 paper.

PROFESSIONAL EXPERIENCE

Snap Research, Los Angeles, CA, U.S.A May 2021 - Aug. 2021 (expected)
Research Intern

Eaton Corporation, Shenzhen, China July 2018 - Jan. 2019
Hardware Intern

TEACHING EXPERIENCE

Teaching Assistant, ECE 6524/CS 6524 Deep Learning Aug. 2020 - Dec. 2020
Teaching Assistant, ECE 276A Sensing & Estimation in Robotics Jan. 2020 - March 2020

TECHNICAL SKILLS

Programming: Python, C/C++, MATLAB
Software & Tools: OpenCV, Linux, Rhinoceros, LaTeX, Kubernetes.
Deep Learning Frameworks: Pytorch, Tensorflow