YI LUO

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EDUCATION

Southeast University | 2016–2020
BA Nuclear Engineering

AWARDS

The 18th National College Student Robot Competition | 2019
Third Prize, ROBOMASTER Finals
First Prize, Appearance Design, ROBOMASTER Southern Division

The 17th National College Student Robot Competition | 2018
Third Prize, ROBOMASTER Finals
Second Prize, Central Division

RESEARCH EXPERIENCE

Computer Vision Engineer, Nanjing KUYEE Co., Ltd.   **August 2020 to March 2022**
- Trained object detection networks in PyTorch framework, optimized and deployed models using TensorRT technology on an embedded GPU device (Jetson NX) in real-time
- Implemented tracking algorithms such as the Kalman filter algorithm, SORT algorithm and DeepSort algorithm
- Simulated a multi-body dynamics system with controllers on a special structured UAV

Research Assistant, Southeast University   **August 2019 to March 2020**
- Created a drone-based face detection dataset
- Developed UAV navigation with an A* route-planning algorithm
- Coded a ground station program to control a DJI UAV on a mobile phone
- Detected balloons with a DJI UAV using feature extraction and template matching methodology

Chairman, SEU Drone Association   **March 2017 to August 2019**
- Detected light features on armor plate using OpenCV SIFT algorithm with Nvidia TX2
- Designed and developed drone control program using Ubuntu/ROS platform
- Involved in the development of various mobile and desktop applications using C, C++, Python, Java, Makefile, and CMake

PUBLICATION

- arXiv preprint: arXiv:2011.07689, 2020. Drone LAMS: A drone-based face detection dataset with large angles

PATENTS

- Light-weight and resistant blade guard that can withstand a ball moving at 108 kilometers per second