基于PYNQ的散色成像系统

An imaging system through scattering media base on PYNQ

> System Architecture

- PYNQ-Z2 board (for overall system control & reconstruction algorithm realization)
- >> Lensless camera (replacing the lens in front of the sensor with scattering material
- Robotic arm (holding the camera and adjusting the angle);
- >> 7-inch display screen (display the raw and reconstructed image)

7-inch display screen Reconstruction algorithm: centered on GD, (PL for gradient calculation, while PS for the other) PL(driver): OV5640 PH. (algorithm): Gradient calculation, while PS for the other) PYNQ PS (interface communication): robotic arm control Schematic illustration PC Schematic illustration

> Application prospect

- >> Medical examination
- Recognizing the traffic signs under haze weather condition







