Project Title
3D Vision-Driven Robots

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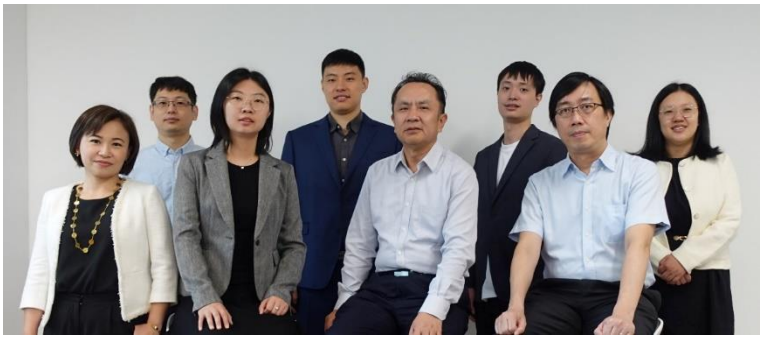
Project Description



Existing robots work without any visual feedback or with slow visual feedback so that they cannot work safely and adaptively in a natural dynamic environment with a lot of uncertainties. This project aims at developing and commercializing technologies and products of 3D vision-driven robots that realize effective and real-time eye-brain-motor coordination for more adaptive, faster, and safer interactions with humans, other robots and objects in natural working environments. The cutting-edge technologies to be developed include real-time 3D imaging sensors and perception algorithms, and universal software and hardware platforms supporting high-frequency eye-brain-motor coordination of robots. We will closely collaborate with the industrial partners to commercialize the 3D vision-driven robots in smart logistics, smart cities, smart construction and smart manufacturing.