

Previously, many UREP and senior projects have also been developed using the lab facility and produced related publications. One such project was to help autistic children develop their social and communication skills using immersive and interactive virtual reality scenarios. Another worth mentioning project is the development of a vibrotactile seat that can send tactile navigation signals to reduce visual and auditory overload on the driver. This was incorporated in a virtual reality driving simulation for evaluation. More recently, UREP-funded students developed an adaptive steering algorithm for redirected walking in virtual environments.



VR products and services are in high demand in the current job market, and VR applications are getting ubiquitous in many domains. In the sectors of gaming and education, VR is an obvious necessity for promoting serious games and multimodal learning in addition to entertainment. Currently, however, applications of VR in healthcare and robotics are of rising interest. VR is revolutionizing the healthcare industry by creating simulated VR surgical environments and allowing 3D visualization of human organs for the purpose of disease diagnosis and prognosis. Applications for various kinds of therapy are also developed using VR. The potential of visual computing and VR in robotics is unlimited, with prospective applications focusing on robot vision for autonomous vehicles, and locomotive, explorative and tele-operative robots. Moreover, VR foresees broad prospects in workplace occupational safety by developing training simulations for army personnel and certain medical and ambulatory staff.

The Visual Computing Lab at Qatar University encourages students majoring in Computer Science and Engineering to craft their careers in Virtual Reality (VR) and related fields and unleash their full potential. The lab also extends the invitation to creative and innovative minds from other departments and colleges for possible collaborative projects.