**Project Name:**  Assessment of the HTC Vive for surgical planning in cardiology  
**Supervisor:**  Kawal Rhode  
**Summary:**  The HTC Vive is a head-mounted 3D display system. This system allows the development of virtual reality applications. In this project we aim to investigate the use of VR in the planning of complex interventional procedures in children with congenital heart disease. We will use already acquired medical imaging data to prepare 3D computer models for display in the VR environment and test the ability of clinicians to make useful measurements or decisions with this technology. We will compare this to the traditional methods of viewing images on a 2D screen.