**FACULTY MENTOR**
Preetham Suresh

**PROJECT TITLE**
Building a patient audio simulator

**PROJECT DESCRIPTION**
Description: This project will involve first capturing a three dimensional sound map dataset of heart, lung and bowel sounds utilizing a tracked digital clinical stethoscope that would be built as part of the project. This position tagged audio dataset would then be used to then simulate and playback heart and lung sounds utilizing a training stethoscope. This would be used to train students, physicians at various levels of training to hone their diagnostic skill.

**INTERNS NEEDED**
2 BS and 2 MS

**PREREQUISITES**
Required Qualifications:
1. Programming in mixed reality
2. Knowledge of C# and Unity

Preferred Qualifications:
1. Experience with the mixed reality toolkit, HoloLens, or any augmented reality programming experience