



# AI based Acoustic Camera based Gesture Recognition.

PID: 2021\DSAI\004

It is proposed to use AI trained engines to recognize hand gestures using an acoustic camera that will provide a touchless experience to users. The acoustic camera that is commercially available will be employed for this purpose while the training of an AI engine will involve the recognition of different hand gestures and linking it to actions.

**Task to be assigned to the intern:** To use commercial Acoustic Camera to develop data base of calculations and to train appropriate AI engine model to develop Gesture based haptic recognition algorithms.

**Learning outcome:** The Intern will learn on 3 fundamental technologies i.e. Acoustic Camera Data Analysis, Gesture Recognition Algorithms, and AI/ML.

**Duration:** 6 months

**Skills required:** Understanding of AI based tools and if possible fundamental of acoustics

**Pre-requisite courses:** Machine Learning, AI

**No. of interns required:** 1