## Live Virtual Reality Streaming

### Introduction
- Live streaming video to a VR headset via the Internet to create an immersive experience for the user while also providing the ability to interact with the environment.
- Key aspects:
  - Camera controlled by head movement
  - Video displayed in stereoscopic 3D
  - Can move camera position using tank
  - System communicates via the Internet

### New Idea
- Live streaming to a VR headset with minimal latency to allow for user input.
  - Video captured using smartphone camera: requires minimal processing and data size is relatively small.
  - Vehicle remote control and head-tracking control via the Internet.

### Research Process
- Three main components to research:
  - Streaming Stereoscopic 3D Image to a VR Headset
  - Head-tracking
  - Vehicle Remote Control
- Project created using existing hardware/software:
  - Skype – video streaming
  - Trinus VR – processing video feed to stereoscopic 3D
  - Internet, Arduino, Electric Imp - communication
- Specialized parts designed in CAD, 3D printed, and assembled

### Results
- Successful implementation of video streaming, head-tracking, and remote-control:

### Video Demo