The AirSticks - an audio-visual gestural instrument

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Fig. 1. The AirSticks audio-visual performance environment in action.

1 PROGRAM NOTES

The AirSticks are an audio-visual gestural instrument designed to allow the composition, performance and improvisation of live electronic music and graphics using movements captured by handheld motion controllers, utilising bespoke software to generate musical and visual content from the gestural controller's real-time position and rotation information. Through this interface, the performer is offered multidimensional control over audio-visual parameters, whilst providing a clearly transparent relationship between gesture and audio-visual product. The graphics are projected onto a transparent screen—or scrim—to allow both the performer and audience to relate to them. Percussionist and

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instrument designer Alon Ilsar has been performing with the AirSticks around the world since 2013 with highlights including a live performance with Alan Cumming at the MET museum in NYC, a TEDx performance with live electronic trio the Sticks at Sydney's Opera House and a solo performance of an hour long audio-visual collaboration with Matt Hughes at Sydney's Recital Hall entitled *Trigger Happy Visualised*. The AirSticks were also presented at the 2019 Guthman Musical Instrument Competition in Georgia Tech in Atlanta, Georgia, where they took out the Audience Choice Awards for Best Instrument and Best Performance. A similar presentation was recently made at SIGGRAPH Asia's 2019 Real-Time Live Competition, in which the AirSticks took out the judge's award for Best Presentation. In this video, we present three excerpts from *Trigger Happy Visualised*, plus a short introduction from SIGGRAPH Asia 2019.

2 PROJECT DESCRIPTION

In this video, we present three excerpts from an hour-long audio-visual work, *Trigger Happy Visualised*, plus a short introduction from a presentation of the AirSticks at SIGGRAPH Asia 2019.

3 PERFORMANCE NOTES

Data from the Razer Hydra gaming controllers goes through the Custom AirSticks MIDI Software (CAMS) into Ableton Live. A second computer runs a Unity scene (Confluence), which receives data from CAMS as well as a Microsoft Kinect 2 sensor. The output visualisation is projected onto a scrim placed between the performer and the audience.

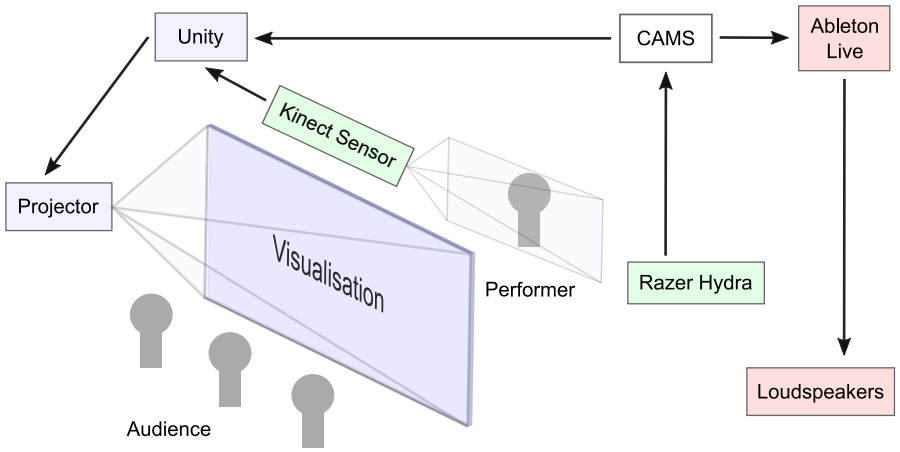

Fig. 2. System diagram

4 MEDIA LINKS

- *Trigger Happy 'Visualised'*: https://alonilsar.com/triggerhappy/

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