

PiAV



PiAV is a multi-sensory piece driven by stochastic processes to create an ever-changing audio-visual experience. The complete system is cross-pollinated: Combinations of pitch-clusters and samples influence the abstracted visual images created from code inspired by traditional analog video feedback techniques. In return, the color spectra and motion velocity within the visual images influence the sound processing creating a meta-feedback system. The piece cycles through a series of scenes that vary from dronelike, contemplative clusters to riotous bursts of sound and energy.

PiAV uses ten networked Raspberry Pi computers. Eight custom-made speakers with embedded Raspberry Pi computers run networked Pure Data patches to provide a continually evolving soundscape. The visual images are created using two Raspberry Pi camera modules, video feedback and custom Python scripts for video processing. A laptop running Max/MSP serves as a central messaging hub.

Clay Chaplin is a composer, programmer, and audio engineer from Los Angeles who explores experimental music through audio-visual improvisation, sound synthesis coding, field recording, and custom built electronics. Clay's works have been performed at the Studio for Electro-Instrumental Music (STEIM), the Deutsche Gesellschaft für Elektroakustische Musik (DEGEM), the New Interfaces for Musical Expression (NIME) conferences, the EarZoom Sonic Arts Festival (IRZU), the San Francisco Electronic Music Festival and many similar festivals and venues. Clay is the Director of Electronic and Computer