# Sculptural Sonic Agents

Andrew R. Brown and John R. Ferguson

This interactive installation explores **musical performance with sonic sculptural agents**. These electronic musical 'agents' are bespoke **handmade electronic instruments** that comprise artificial listening and sound generating capabilities. They listen to the sonic environment around them (including other machine and human performers) and respond in ways programmed by the designers. This installation features an ensemble of Sonic Agents and some acoustic percussion instruments for people to play. All agents, human and machine, have the capability for sonic feedback between one another, thus enabling the **interactive exploration of orchestrated human-machine ensembles**. This work extends the boundaries of new musical practices and help us **better understand musical agency and interaction** in general as we attempt to imbue our devices with these capabilities.

Sculptural Sonic Agents

Andrew R. Brown and John R. Ferguson
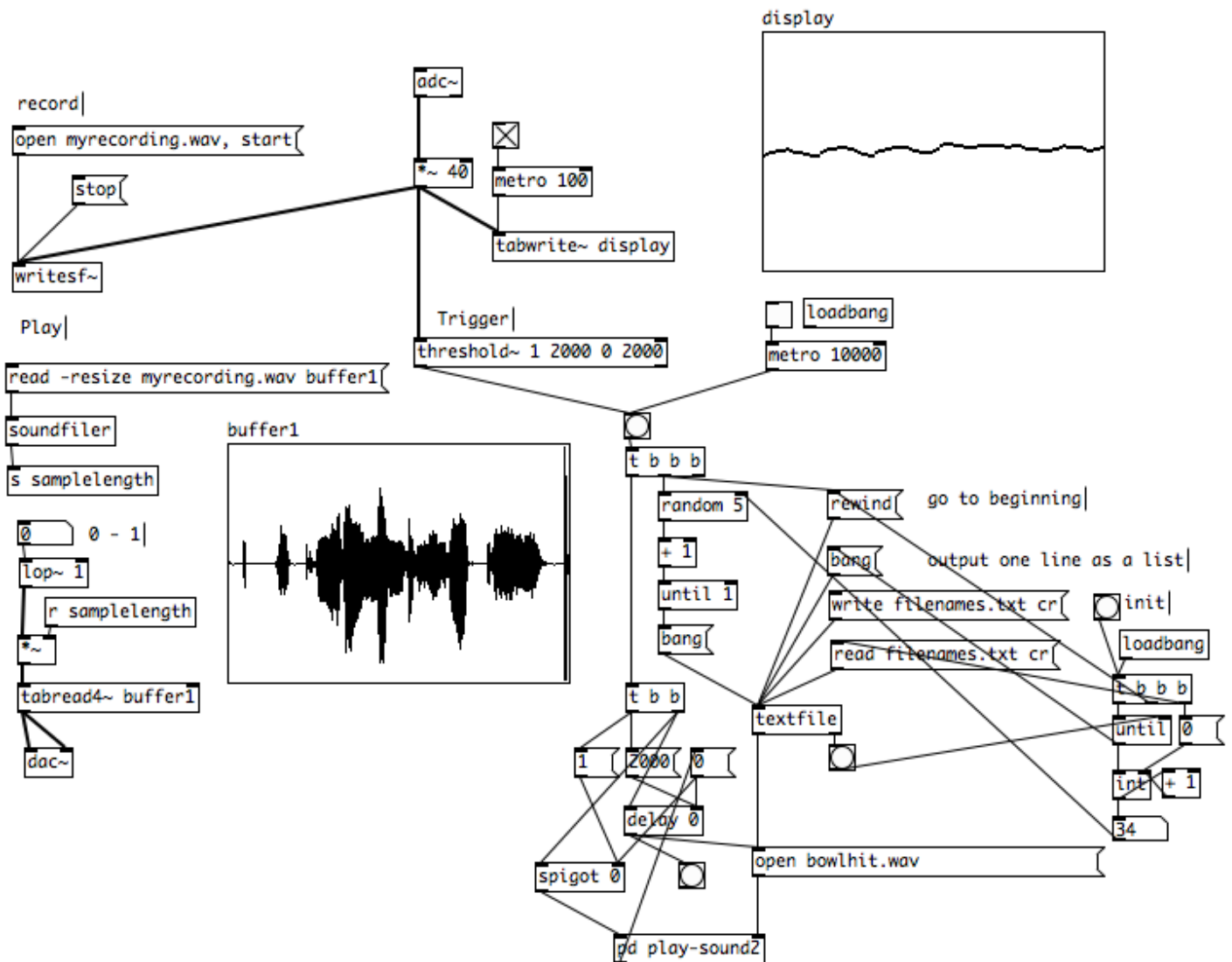
Above is the Pure Data (Pd) patch that runs on the Bela Board microcontrollers.

Andrew R. Brown is an active computer musician, computational artist, builder of creative software tools, researcher and supervisor of research students. He is Professor of Digital Arts at Griffith University in Brisbane and Program Director for the Bachelor of Creative and Interactive Media. (andrew.r.brown@griffith.edu.au)

John Ferguson is a post-digital/electronic musician based in Brisbane Australia. His work focuses on 'performing technologies', raising the question: are we performing the technology or is it performing us? He is Senior Lecturer and Head of Music Technology at Queensland Conservatorium Griffith University. (john.ferguson@griffith.edu.au)