Embedding Embodied Music Generation

Low-resource computing and AI platforms suggest the technical possibility of embedded intelligent musical instruments, but they don't automatically tell us what these instruments should do musically. Typical symbolic music generation systems are a poor fit for NIMEs that generally rely on diverse and embodied sensory data and frequently do not lend themselves to performances involving "notes".

Another option for generative AI within an embedded platform is to focus on musical gestures rather than notes, a more embodied approach to music generation. This can occur at different levels of detail, for example individual interaction events or higher level sequences of interactions. In this talk, I will demonstrate the potential for embedded embodied music generation through the EMPI, a Raspberry Pi-based platform for embodied predictive interaction, and discuss NIMEly possibilities for music generation within an embedded system.

Examples of music with the EMPI can be found here: https://youtu.be/tvgqxmHr9wU