The Medium is the App.
A discussion session is proposed about the use of mobile devices as a delivery platform for musical experiences. With the pervasive use of devices such as the iPhone (and its relatives), Android phones and hand held gaming devices, such as the Nintendo DS and the Sony PSP, there is now a large potential audience for musical experiences/compositions that can be algorithmically generated in real-time. This, and the pervasiveness of the Internet, opens up the possibility of distributing the sort of generative musical systems that computer music composers have long been developing to consumer entertainment devices. Two recent noteworthy examples from the iPhone platform are Brian Enos “Bloom” App and Ge Wang’s “Ocarina” App. The form of the event would be a brief introduction, followed by a sharing session, loosely structured around the three main topics outlined below. Participants will be encouraged to share their experience in the area (if any), or raise any questions they may have.

User Interaction
The sort of work being considered covers the spectrum ranging from “Automatic Music Generators”, which require no active user involvement, to those which are essentially instruments. There are currently many Apps that mimic traditional instruments, such as keyboards, guitars and wind instruments, but this sort of system may also take advantage of new possibilities for user interaction. Musical interfaces can be designed from the ground up to exploit the potential for touch screens and accelerometers. This should enable the composer/instrument builder to make working with these systems more intuitive for the consumer.

Music/Compositional Process Visualization
As the graphics capabilities for these mobile devices grow, they can play a role in providing feedback of the state of the system by making use of visualization of the musical creation processes being used. This could be done using 2D or 3D graphics engines. The use of visualization could make some of the more non-mainstream music more accessible to the public.

Development Tools/API’s etc
There are a number of ways to develop this type of musical application. One approach is to adapt the low level tools provided for developing games, such as OpenAL and OpenGLES, to create your own custom audio and graphics system. This is the most flexible approach, but has a very steep learning curve. A possibly easier variant on this idea is to try to make use of high-level game development tools, such as Blender, to produce the work. Another approach is to port the runtime environments of currently used music programming systems, such as ChucK, PD, MaxMSP etc, to the mobile devices. This will involve a lot of work by the development community. Another possibility is to create a new authoring tool especially for mobile devices.

The topic of Mobile Devices as a music platform, while not new, is an obvious area of growth, so more composers are working in this area, and more new composers find this something they would like to explore. This session aims to give composers a sense of what is currently happening in this area.