## Guide to DVD Chapter 33 Examples: Jonathan Bailey

# **Converting Csound Opcodes into Apple Audio Unit Plug-ins**

#### **Prerequisites**

Download and install **XCode**. A working installation of **XCode** will be required to implement and build the examples. Developers who do not already have a working instance of **XCode** set up in their environment should perform the following steps:

- Create a free Apple Developer Connection online account at http://developer.apple.com/.
- Download and install the latest version of XCode for your version of Mac OS from <a href="http://developer.apple.com/tools/download/">http://developer.apple.com/tools/download/</a>, which will also install the necessary Core Audio software development kit (SDK).
- To become familiar with the particulars of this integrated development environment (IDE), developers without prior exposure to XCode should read through the *XCode User Guide* available at <a href="http://developer.apple.com/documentation/DeveloperTools/Xcodedate.html">http://developer.apple.com/documentation/DeveloperTools/Xcodedate.html</a>

#### **Contents**

These are the three examples discussed in the text – ResonUnit, OscilUnit and Babo.

### **Compiling the Code**

The plug-ins can be built by simplying choosing "Build" from within Xcode. No special libraries are otherwise required.

## **Testing and Using the Plug-ins**

To run these plug-ins, ensure that the files are copied into one of your two Audio Unit component directory locations:

- Library/Audio/Plug-ins/Components
- /Users/<youruser>/Library/Audio/Plug-ins/Components

Then, launch your Audio Unit host of choice (Logic, Live, AULab, etc.) and create an instance of the plug-in on a channel in the host.