SuperCollider Tutorial

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What is SuperCollider?

According to http://supercollider.sf.net/:

> SuperCollider is a state of the art, realtime sound synthesis server as well as an interpreted Object Oriented language which is based on Smalltalk but with C language family syntax. The language functions as a network client to the sound synthesis server.
>
> SC was written by James McCartney over a period of many years. It is now an open source GPL'd project maintained and developed by James and a few others.

Which is to say that SuperCollider is a tool to help you use your computer to make sounds. It's free and open source. That means that you can look at how SuperCollider was written and modify it, share it with other people and use it any way you want.

SuperCollider has a steeper learning curve than some other music programs like MAX, but it is more flexible and more powerful. This book is written for people who have not programmed before. If you can use your computer, you can learn to program.

What Can you Do With It?

1. Digital synthesis

Supercollider can make any sound that can be created by DSP.

2. FX processing

SC can do delays, filters, etc and can tweak a line-in or a pre-existing sound file in any way that you can think to program

3. Algorithmic composition

Supercollider can generate sounds and play them, and it can also generate MIDI files that can be opened by Finale, Sibelius or other notation software and arranged for real instruments

Getting Started

First, you need a copy of SuperCollider 3, otherwise known as SC3. You can download it from http://sf.net/project/showfiles.php?group_id=54622. SC3 exists for Mac OSX, Windows and Linux. The Mac version is the most developed and the most stable and the version referred to by this book. However, aside from the appearance and the key-shortcuts, the Windows and Linux versions should be virtually the same.

There are some websites designed to help SuperCollider users, including the SC home page at http://www.audiosynth.com/, the SWIKI at http://swiki.hfbk-hamburg.de:8888/MusicTechnology/6, and the Electronic Life SC Forum at http://electroniclife.co.uk/scforum/index.php.

About this book

Explanatory text looks like all the text we have seen so far.

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Code examples look like this.
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Vocabulary words are in **bold** and are usually followed by a definition. They can also be found in the glossary.