

THE  
NOISE  
UPSTAIRS  
WORKSHOP

SEPT 27  
OCT 3

# laptop workshop



## THE NOISE UPSTAIRS presents a FREE Laptop Workshop at FUEL Cafe 448 Wilmslow Road, Withington

Have you ever wondered how people 'play' a laptop? Ever wanted to find out more yourself?

Laptops make great musical instruments; there's so much you can do with them. Effects, live coding, processing, sampling just some of the fun you can have with a laptop. Laptops are increasingly ubiquitous while the capabilities and instrumental performance opportunities are ever increasing. We are offering a free laptop noise making workshop at the end of September. This will involve two workshops and then an ensemble performance at the October Noise Upstairs. All you need is a laptop, boldness and a desire to imagine something un-heard.

If you have a laptop, then you can make music.

During the course of this workshop you will go from exploring the musical possibilities of pre built applications to exploring the physical sonority of the laptop. Exploring ensemble methods of playing and collaborating the workshops will seek to facilitate further ongoing play. In preparation for the final performance we shall be experimenting with the ultimate flexibility of live coding within the Chuck programming environment.

We will provide you with ideas and links to software capable of expanding your laptop into a noise machine. Suggestion of ways to

listen and the kind of musical sonority available. Initially we will suggest playing techniques with existing software before exploring the opportunities of live coding to create a customizable, individual instrument. Interface wise it's just what a laptop came with, ASCII keyboard, track pad, mic, line in and/or webcam.

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The Noise Upstairs  
WORKSHOPS

 10/2009

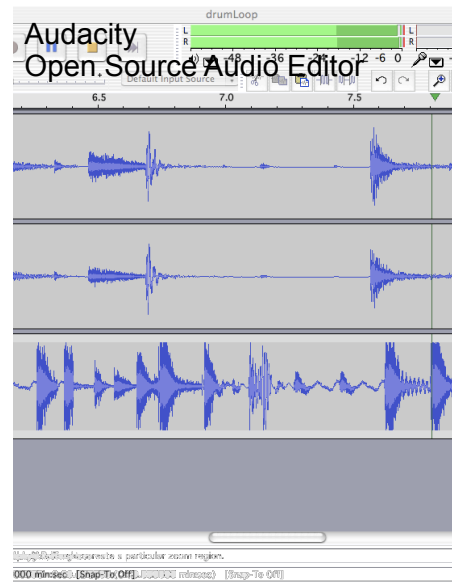
The Noise Upstairs is a free improvisation jam night that has been bringing you some of the most exciting noisicians for the last two years. As part of The Noise Upstairs new proactive facelift, we are offering quarterly workshops, which will run on the weekends preceding the jam night, culminating in a 'featured performer(s)' spot on the night. If you are interested in taking part in the jam night, or the workshop, or for any other Noise related activities, visit the webpage at [www.thenoiseupstairs.com](http://www.thenoiseupstairs.com) and drop us a line, or sign up for the mailing list.

# Laptop 101

1. Live Coding - writing code in real time to create sonic material, musical structure and dynamic interaction. try - Chuck, Supercollider, Max/MSP
2. Sample Playing - reuse previously record material with playback controls, looping, playback speed. try PD, Max/MSP, Logic, Cubase, Finder
3. Effects Processing - treat live audio input or recorded material with effects altering parameters with player input using either vanilla laptop input or more exotic devices. try PD, Max/MSP, Cubase
4. Synthesis Generation - generate new sounds as either source material for other processing, to be sampled or just performed. Chuck, SuperCollider, CSound

## Chuck Strongly timed live coding

```
arguments
4 //initialise control array outside of class due to bug
5 new int[2][8] @=> Nm.controlarray;
6
7 fun void speaker (int speakernum)
8 {
9 // white noise through envelope
10 Noise n => Envelope e => dac.chan(speakernum);
11
12 //main loop
13 while( true )
14 {
15 //main control loop
16 if(Nm.controlarray[speakernum][0] == 1)
17 {
18 Std.rand2f(Nm.controlarray[speakernum][1],Nm.controlarray[speakernum][2])::ms => dur
19 <<< speakernum , t >>>;
20 e.keyOn();
21 t => now;
22 e.keyOff();
23 t => now;
24 Std.rand2f(Nm.controlarray[speakernum][3],Nm.controlarray[speakernum][4])::ms => dur
25 }
26 if(Nm.controlarray[speakernum][0] == 0)
27 {
28 500::ms => now;
29 }
30 }
31 }
32
33 spork ~ speaker(0);
34 spork ~ speaker(1);
35
36 while (true)
37 {
38 100::ms => now;
39 }
40
```

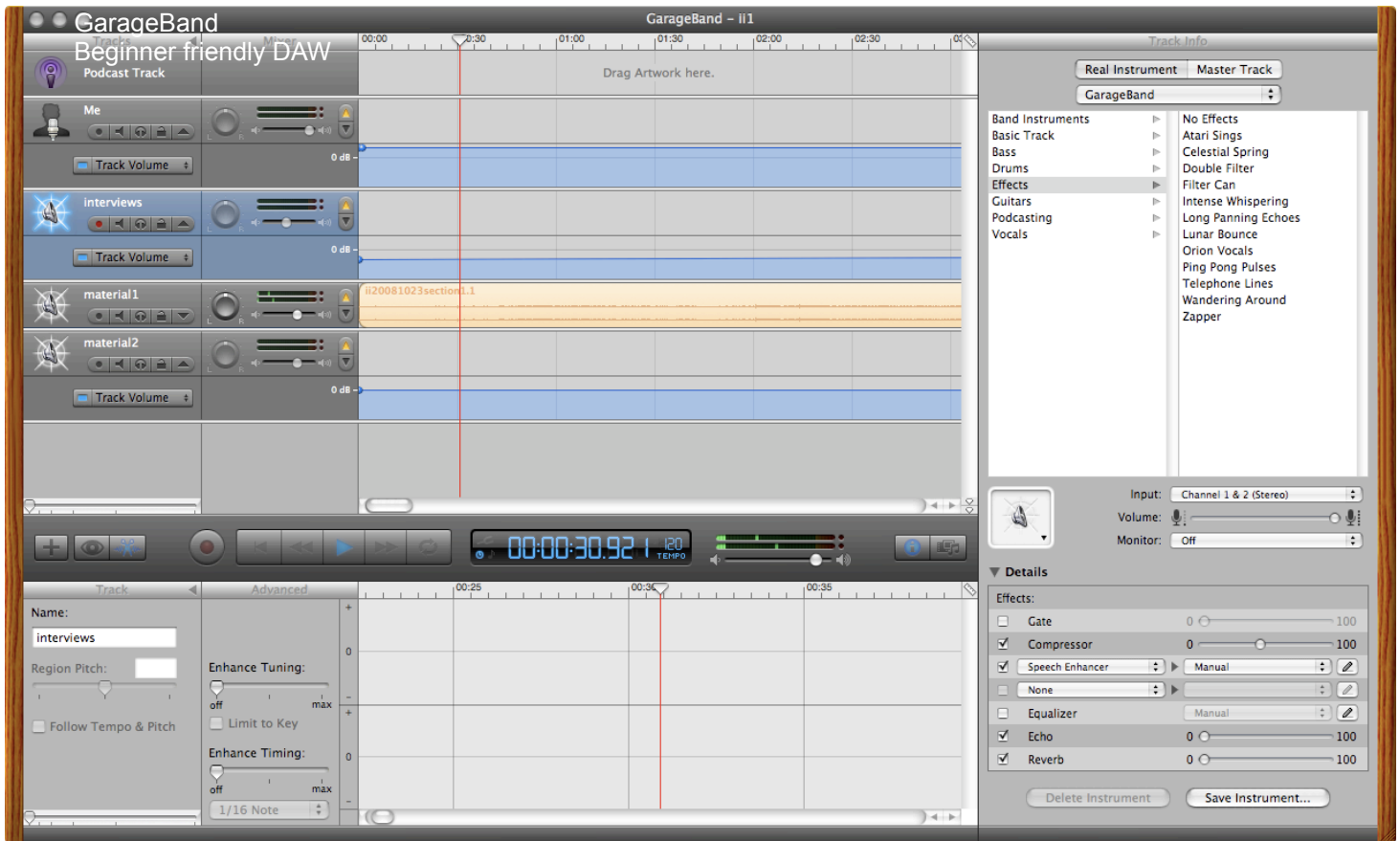


Scott Hewitt has been making music with computers since he was 16 and enjoys improvising and performing laptop music. When not playing Scott directs the Huddersfield Experimental Laptop Orchestra and is a co-founder of the Inclusive Improv.

[www.scotthewitt.co.uk](http://www.scotthewitt.co.uk)

[www.inclusiveimprov.co.uk](http://www.inclusiveimprov.co.uk)

[www.ablelemon.co.uk/helo](http://www.ablelemon.co.uk/helo)



## To Download

Sample Looper [www.ableton.co.uk/code](http://www.ableton.co.uk/code)

miniAudicle [audicle.cs.princeton.edu/mini](http://audicle.cs.princeton.edu/mini)

Max/MSP Runtime [www.cycling74.com](http://www.cycling74.com)

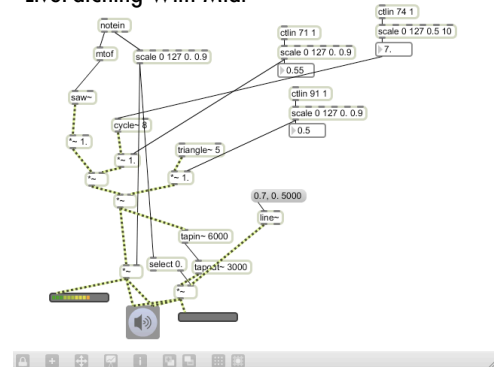
Audacity [audacity.sourceforge.net](http://audacity.sourceforge.net)

Renoise [www.renoise.com](http://www.renoise.com)

ChuckK <http://chuck.cs.princeton.edu/>

## Max MSP

### LivePatching With Midi



## Interested in more?

Sign up to the Noise Upstairs mailing list to find out about future workshops, performances, and events.

Visit [www.thenoiseupstairs.com](http://www.thenoiseupstairs.com) to sign up.



# Recommended Listening

TOPLAP001 - A brief  
history of live coding

Lawrence Casserley,  
Jeffrey Morgan - Room 2  
Room

League of Automatic  
Music Composers -  
1978-198

## Further Information...

### Laptop Links

TOPLAP => <http://www.toplap.org/>

ChuckK => <http://chuck.cs.princeton.edu/>

Max/MSP => [www.cycling74.com](http://www.cycling74.com)

Inclusive Improv Live Coding => <http://www.inclusiveimprov.co.uk/livecoding>

Real DJ's Code Live =>  
<http://www.wired.com/print/science/discoveries/news/2006/07/71248>

LOSS Live Code => <http://livecode.access-space.org>

PLOrk => <http://plork.cs.princeton.edu>

HELO => [www.ablelemon.co.uk/helo](http://www.ablelemon.co.uk/helo)

SuperCollider => <http://supercollider.sourceforge.net/>

### To Read

Bang PD  
<http://pd-graz.mur.at/label/book01>

The Digital Artists Handbook (Sound Section)  
<http://www.digitalartistshandbook.org>

Live coding in laptop performance  
NICK COLLINS, ALEX McLEAN, JULIAN ROHRHUBER and ADRIAN WARD

NRCI: SOFTWARE TOOLS FOR LAPTOP ENSEMBLE  
Christopher Burns and Greg Surges

The Computer Music Tutorial  
Curtis Roads

Chuck Manual  
[http://chuck.cs.princeton.edu/release/files/chuck\\_manual.pdf](http://chuck.cs.princeton.edu/release/files/chuck_manual.pdf)

## How to Take Part:

### Laptop Workshop

Interested in signing up for the workshop? Follow the two easy steps below and you'll be making all sorts of hideous noise.

### Buy/Borrow a Laptop

Any will do, so long as it runs either Mac OS X, Windows, or even Linux.

### Book your seat

Given the limited space we have available to us (upstairs at Fuel) we can only accommodate so many



people. As soon as you know you want to be involved, e-mail us at

[workshops@thenoiseupstairs.com](mailto:workshops@thenoiseupstairs.com)

saying what toy you plan on lapping, or speak to Anton or Rodrigo at the Noise Upstairs jam.

## THE NOISE UPSTAIRS

EVERY MONTH ON THE  
SECOND THURSDAY OF THE  
MONTH @ FUEL CAFE,  
WITHINGTON.

FOR MORE INFO:

[WWW.THENOISEUPSTAIRS.COM](http://WWW.THENOISEUPSTAIRS.COM)  
[INFO@THENOISEUPSTAIRS.COM](mailto:INFO@THENOISEUPSTAIRS.COM)