

ELECTRO FRINGE

29th September – 3rd October 2011

Analog Electronic Music: a gentle introduction to using CMOS

A workshop by artist, academic and computer musician Joe Mariglio

Build your own analog synths and effects! Pulsewave oscillators, distortion pedals, filters, and octave dividers can be designed from simple boolean logic gates and combined into a dizzying array of soundmaking devices.

This workshop is aimed at tinkerers interested in expanding their sonic arsenal with unique analog instruments & effects. Emphasizing practice over theory, Joe will walk the absolute beginner through a series of analog "recipes" which students can follow along on their own solderless prototyping boards.

This workshop will cover the following recipes:

1. using the 4093 to produce a tone
further exploration: using two or more oscillators to gate each other
2. using the 4049 to amplify sounds
further exploration: producing a filter with the 4049, producing a distortion circuit with the 4049
3. using the 4040 with either of the above circuits to produce an octave drop
4. (time permitting) using the output of the 4049 to drive an oscillator network

Concepts in analog electronics, specifically pertaining to the use of the CMOS series of integrated circuits, will be discussed and illustrated by the above recipes. The workshop will cover basic concepts in electronic music such as "what is a square wave?" and "what does a filter do?" Ultimately, the workshop will hopefully introduce its attendees to the world of electro-acoustic instrument building, and invite the questioning of what the music tech industry would have us take for granted.

Where: Studio 332, Webster Building, Kensington Campus

When: Friday 25 March, 2011 10am – 3pm

How much: Free for UNSW students, \$20 for others

Places are limited, registration is essential.

To register, go to <http://ef2011unsw.eventbrite.com/>

For more information on the artist and more events, visit electrofringe.net

This event is co-presented with the Creative Practice & Research Unit at the School of English, Media and Performing Arts, UNSW.

