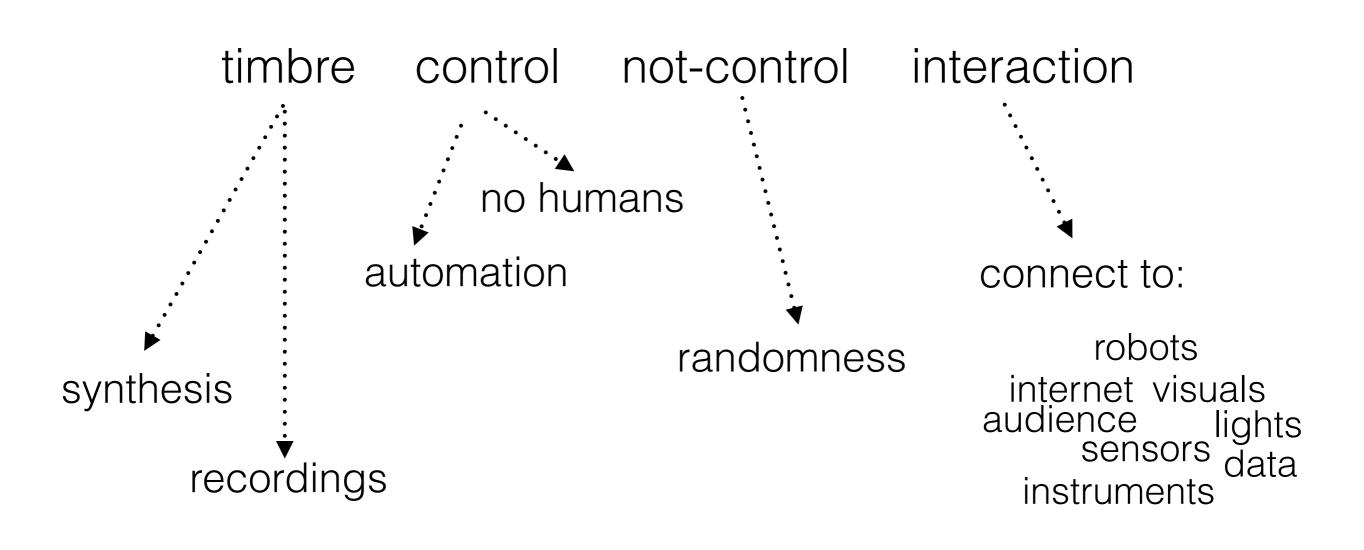
# Intro to computer music with Pd

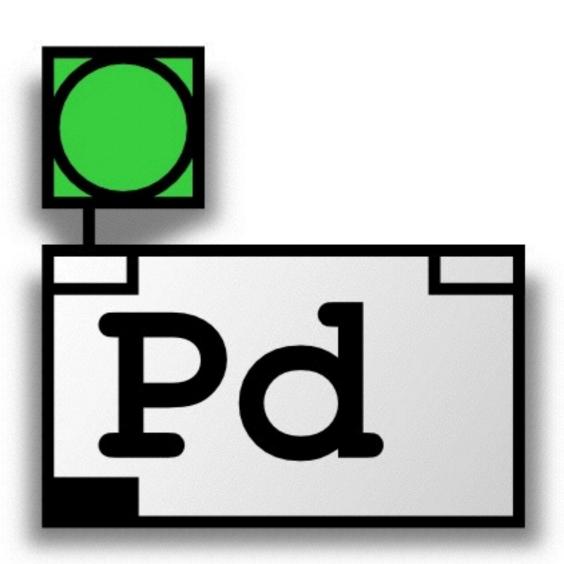
Charles Martin 2014

## why computer music?



## why Pure Data (Pd)?

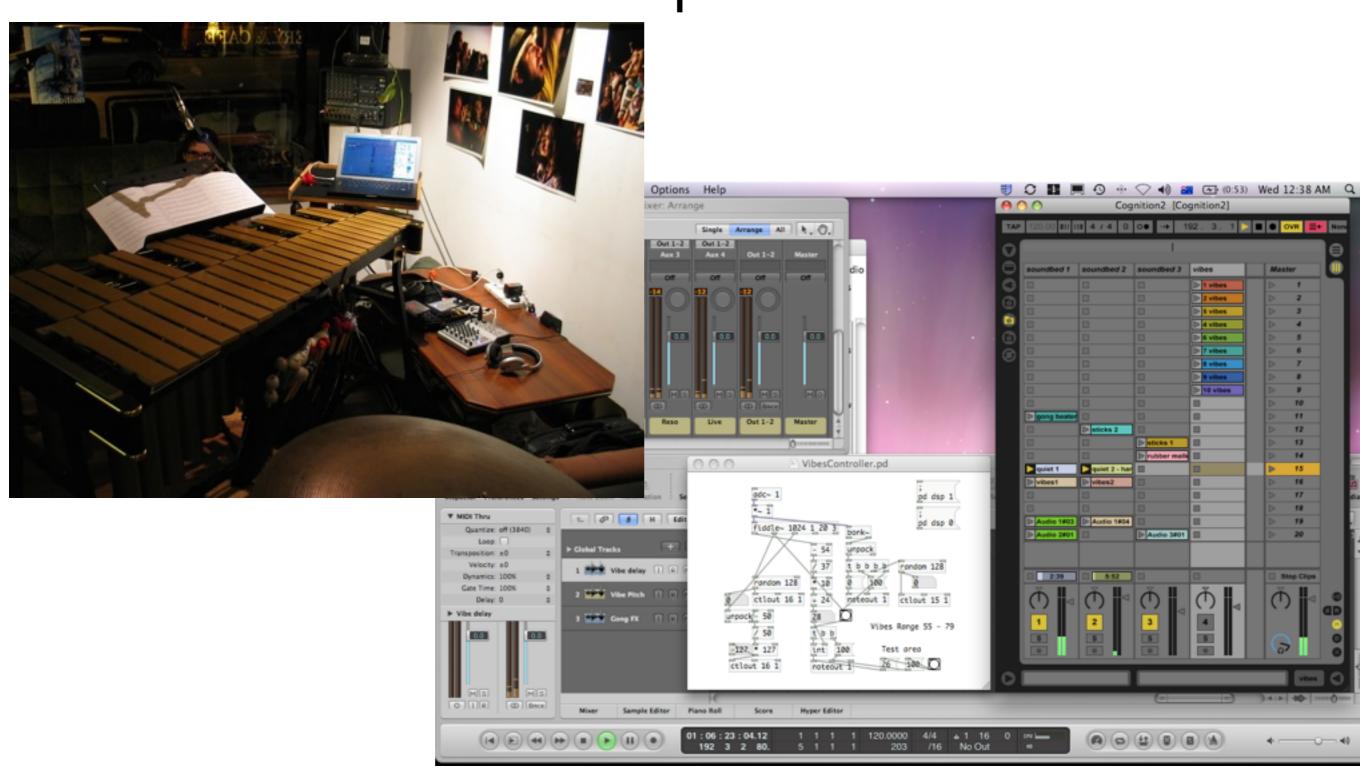
- free
- visual
- old
- works on everything (mac, windows, linux, iPhones, iPads, iPods?)

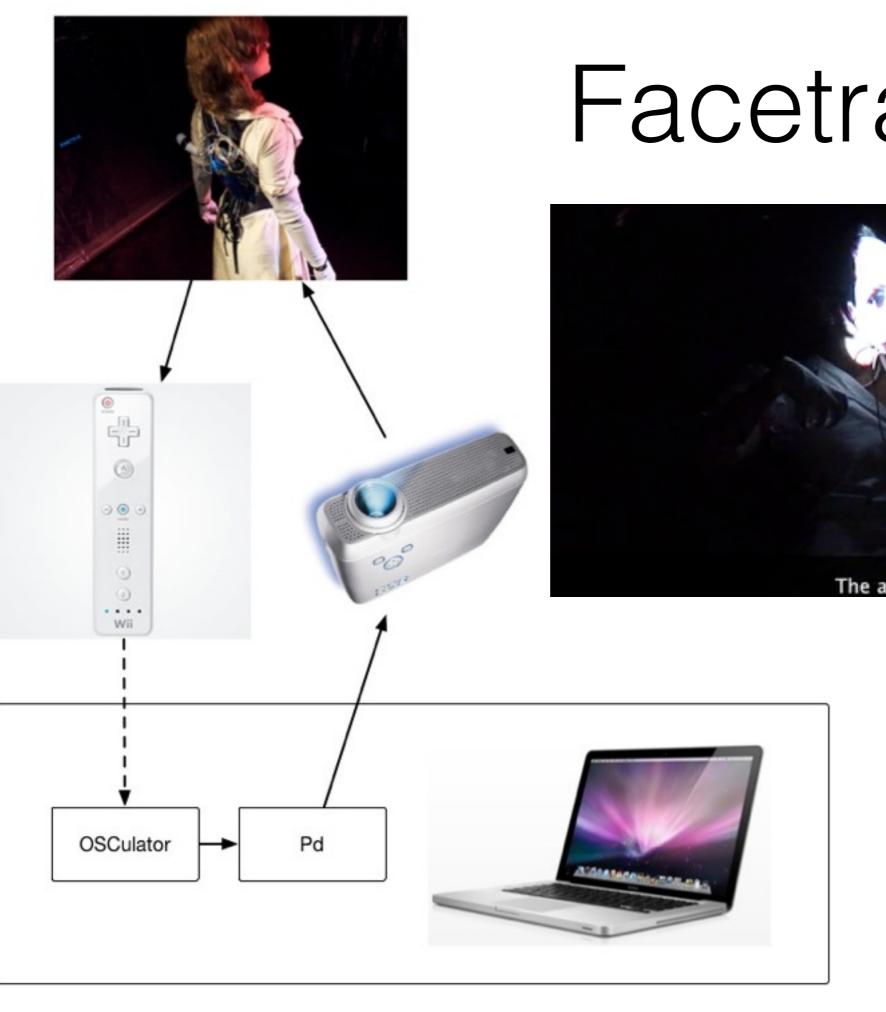


#### reality: more than one tool

- lots of computer musicians use a mix of tools
  - Ableton for messing with sound files and loops
  - Logic/Mainstage or other for synths
  - Pd for gluing things together
- communication through OSC or MIDI

# Music for Vibraphone and Computer

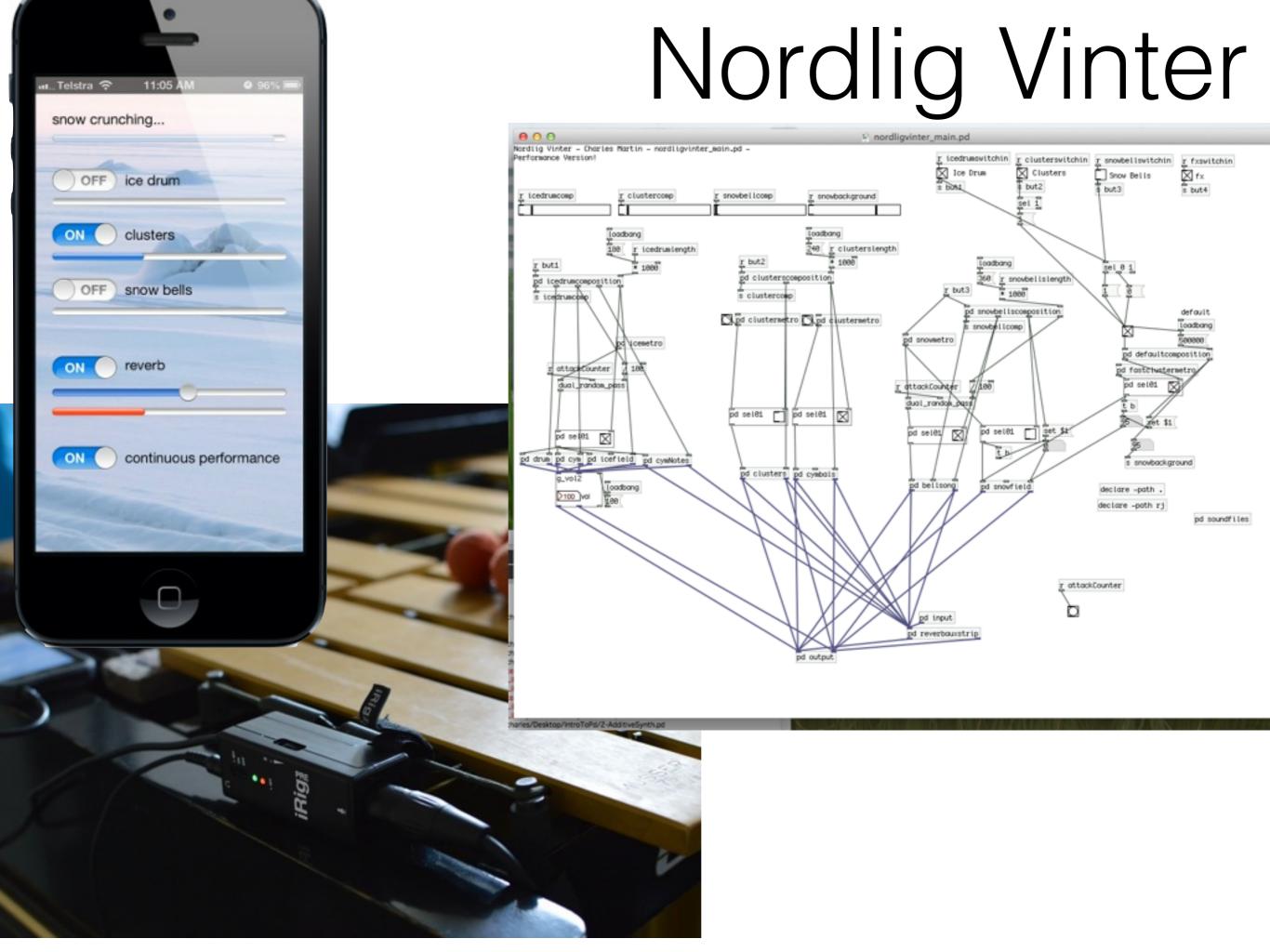




### Facetracker







## Examples: Live Patching

- Synthesis:
  - + "hello world" sine tone
  - + Basic Additive sine Tones
  - + FM Synthesis
- Recordings:
  - + Playing back a sound file
  - + messing with a sound file
- Control
  - + ADSR Envelope Generator
  - + Controlling multiple instruments
- Not-Control
  - + Random Values
  - + Markov Chains
- Interaction
  - + Fiddle and Bonk
  - + Sensors
  - + New Interface
  - + MIDI / OSC

### why not Pd?

- visual programming sucks (write once, read never)
  - where does the program start? hard to tell.
  - make 10 synths? Sure copy and paste.
  - make 100 synths? Uh....
- can do in SuperCollider for example:

```
100.do({{SinOsc.ar(Rand.new(35.0,2000.0),0,[0.1,0.1],0)}.play;})
```

### two blog posts:

- Getting started with percussion and computer music (2011): <a href="http://charlesmartin.com.au/blog/2011/3/27/getting-started-in-computer-music-and-percussion.html">http://charlesmartin.com.au/blog/2011/3/27/getting-started-in-computer-music-and-percussion.html</a>
- How to learn Pd (2014): <a href="http://charlesmartin.com.au/blog/2014/3/11/how-to-learn-pd">http://charlesmartin.com.au/blog/2014/3/11/how-to-learn-pd</a>