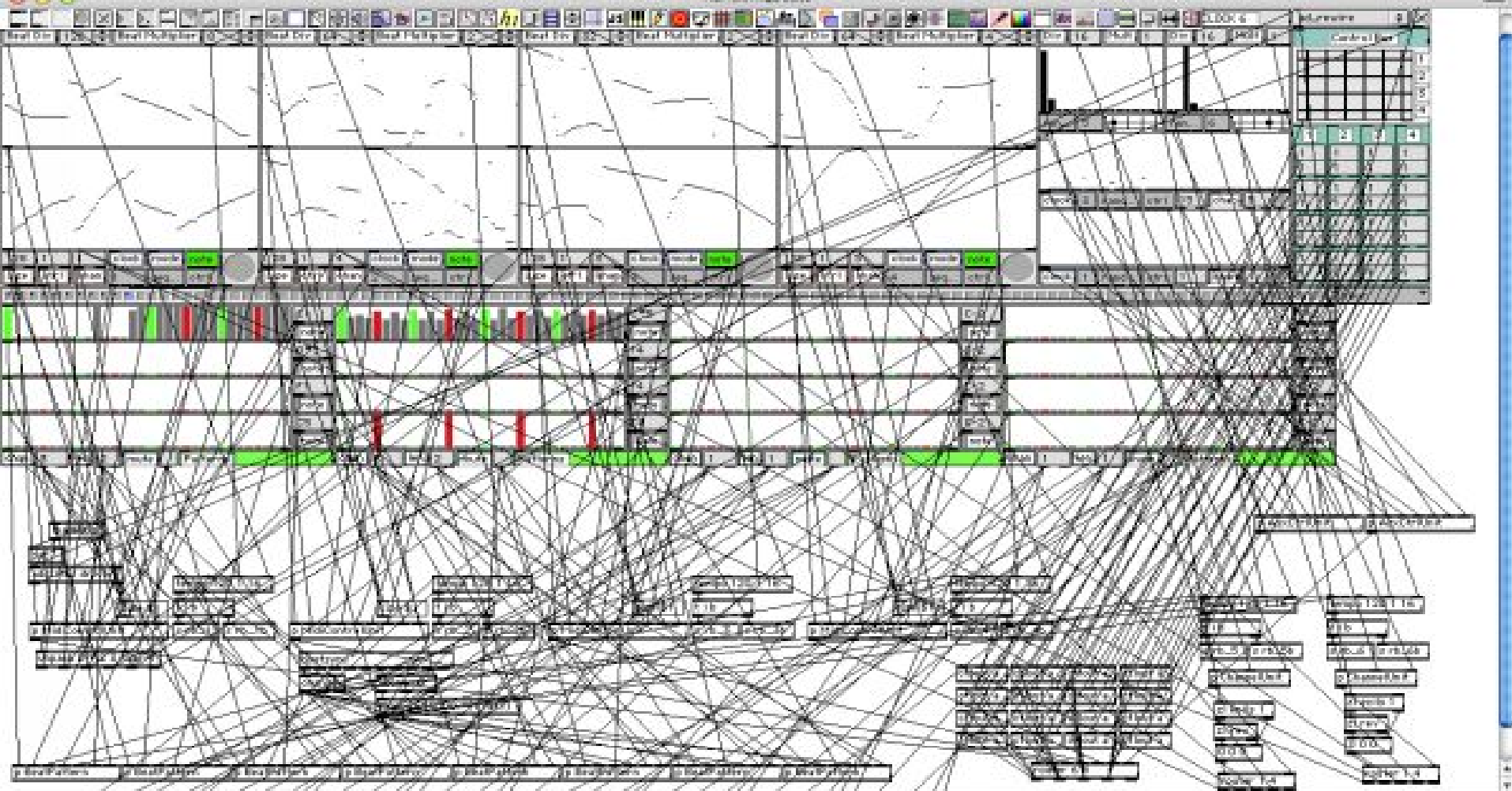


# How to build a Yamaha DX7 with Go and SuperCollider

# Personal Background

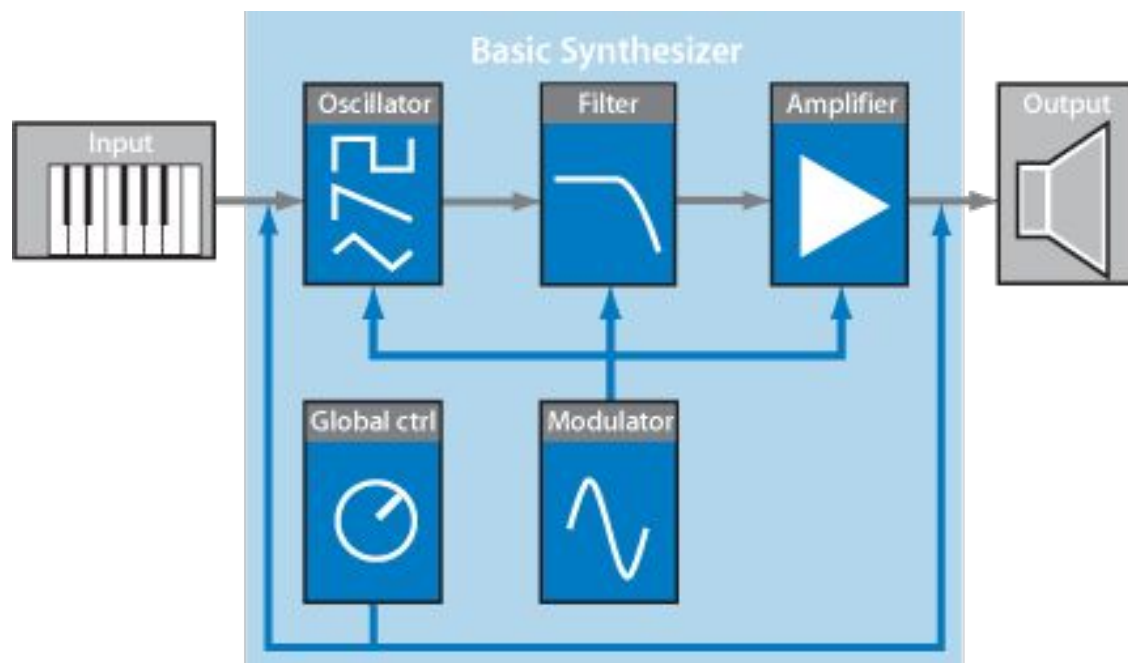
- DX7 was my first synthesizer.
- Released music, sound recordings.
- 2013 ChuckK talk.
- Go engineer.



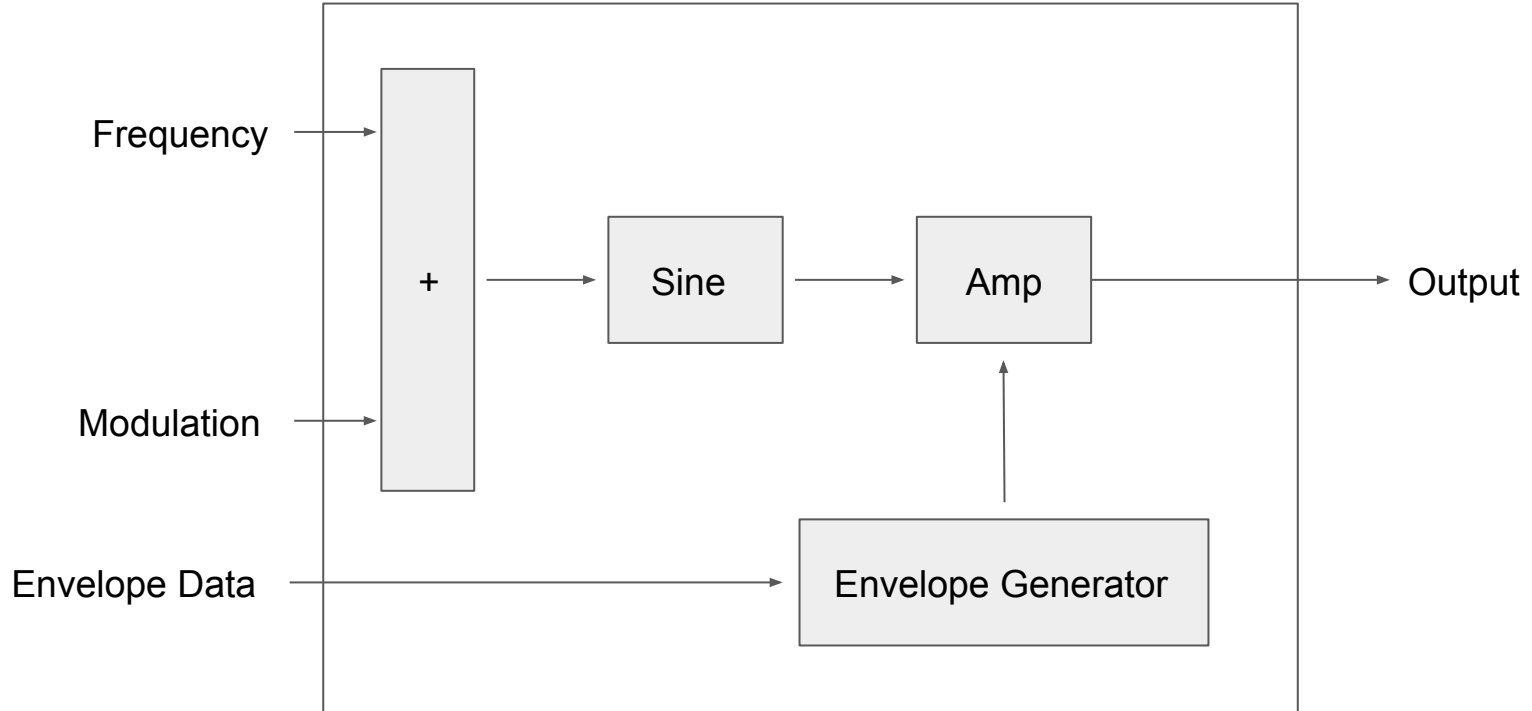
10

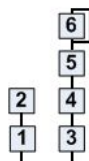
# Synthesizers

- Oscillator (source)
- Modulator
  - Envelope
  - LFO
- Filter
  - Lowpass, Highpass, Bandpass, Notch, Comb
- Amplifier
- Create new sounds by using various combinations of the above.

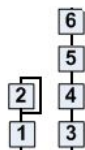


## Operator





1



2



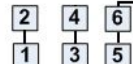
3



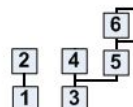
4



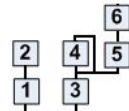
5



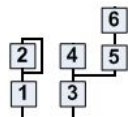
6



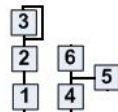
7



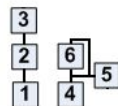
8



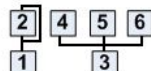
9



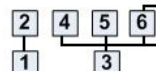
10



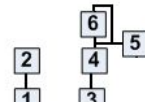
11



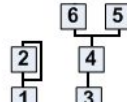
12



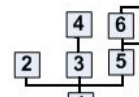
13



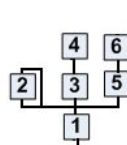
14



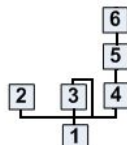
15



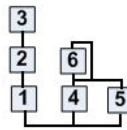
16



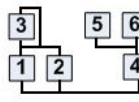
17



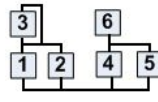
18



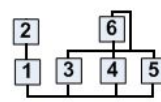
19



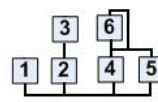
20



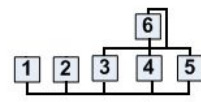
21



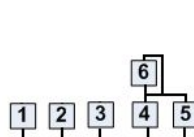
22



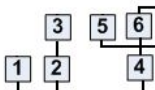
23



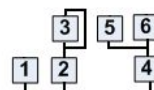
24



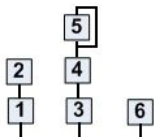
25



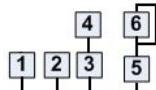
26



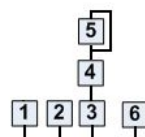
27



28



29



30



31

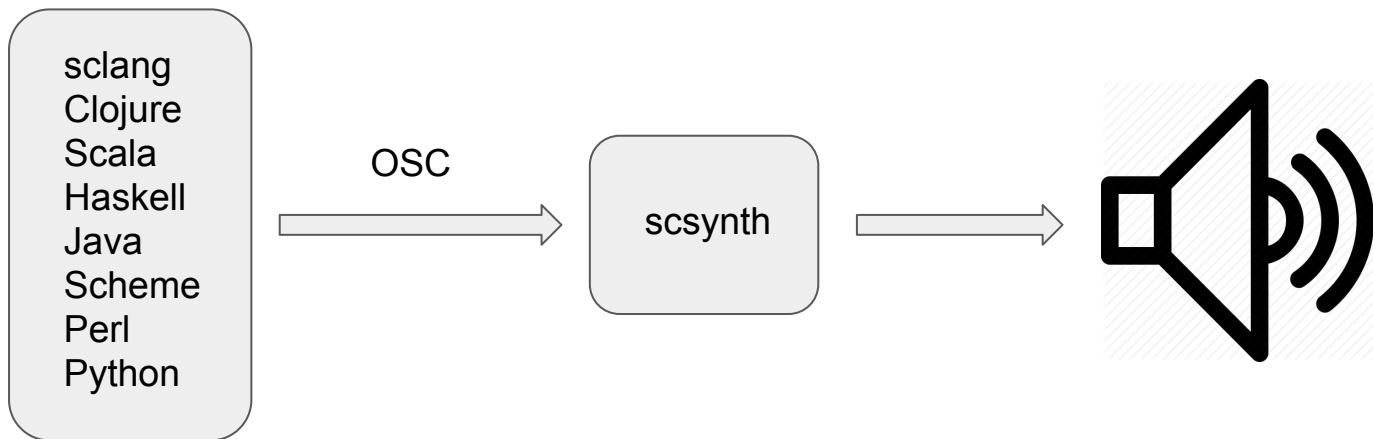


32



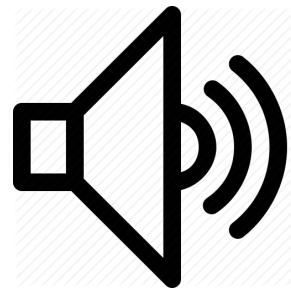
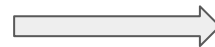
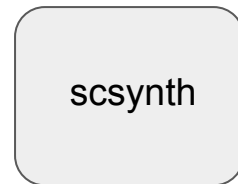
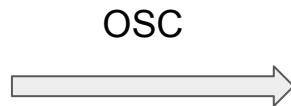
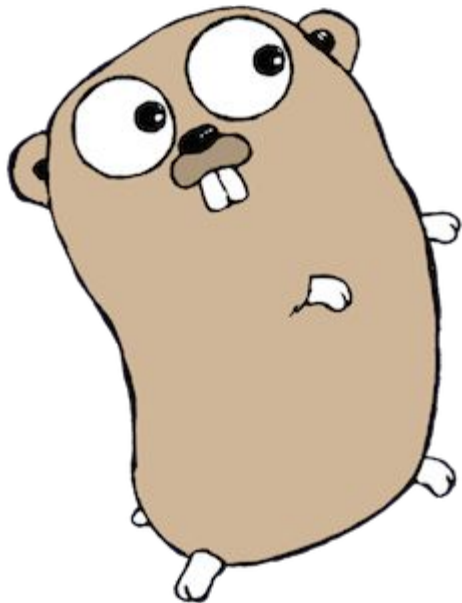
# SuperCollider

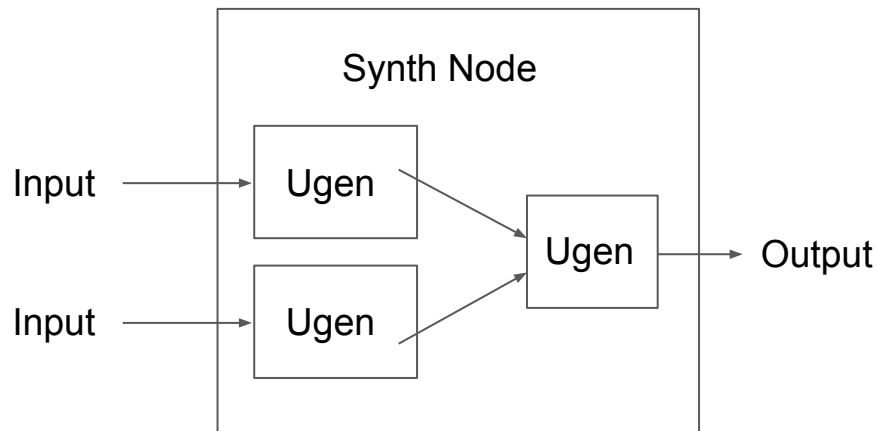
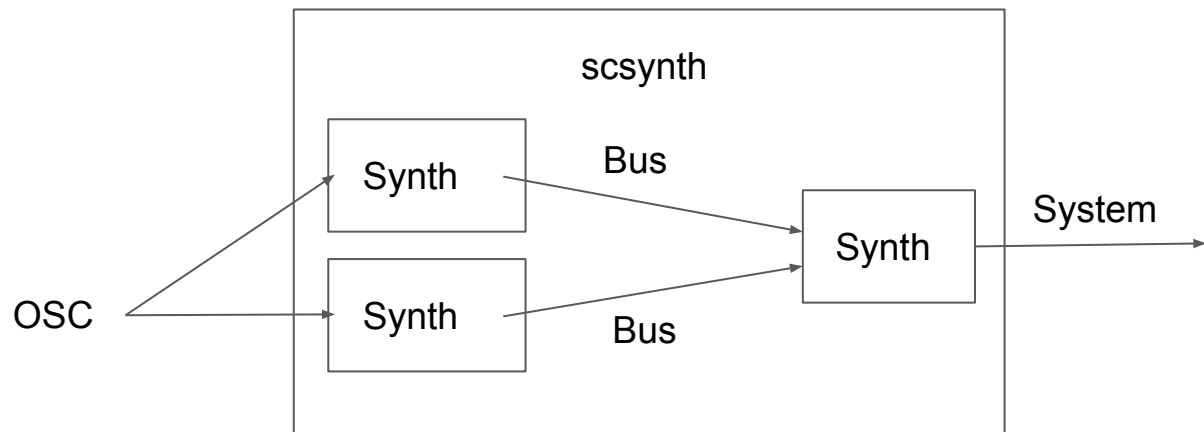
- Synth-O-Matic meets Pyrite
- Version 1 first purchase by John Bischoff
- Version 3 architecture





[github.com/scgolang/sc](https://github.com/scgolang/sc)





# Links

- SuperCollider
  - [Paper](#) by James McCartney for ICMC 1996.
  - [Announcement](#) on comp.music.research in 1996.
  - <http://doc.sccode.org>
- [Networked Resources for Collaborative Improvisation](#)
  - Protocol build on top of OSC for live improvisation with computers.
- [FM Tone Generators and the Dawn of Home Music Production](#) (Yamaha)
- <http://freesound.org/people/wjoojoo>
- <http://spoomusic.com/category/artists/wjoo-joo/>