

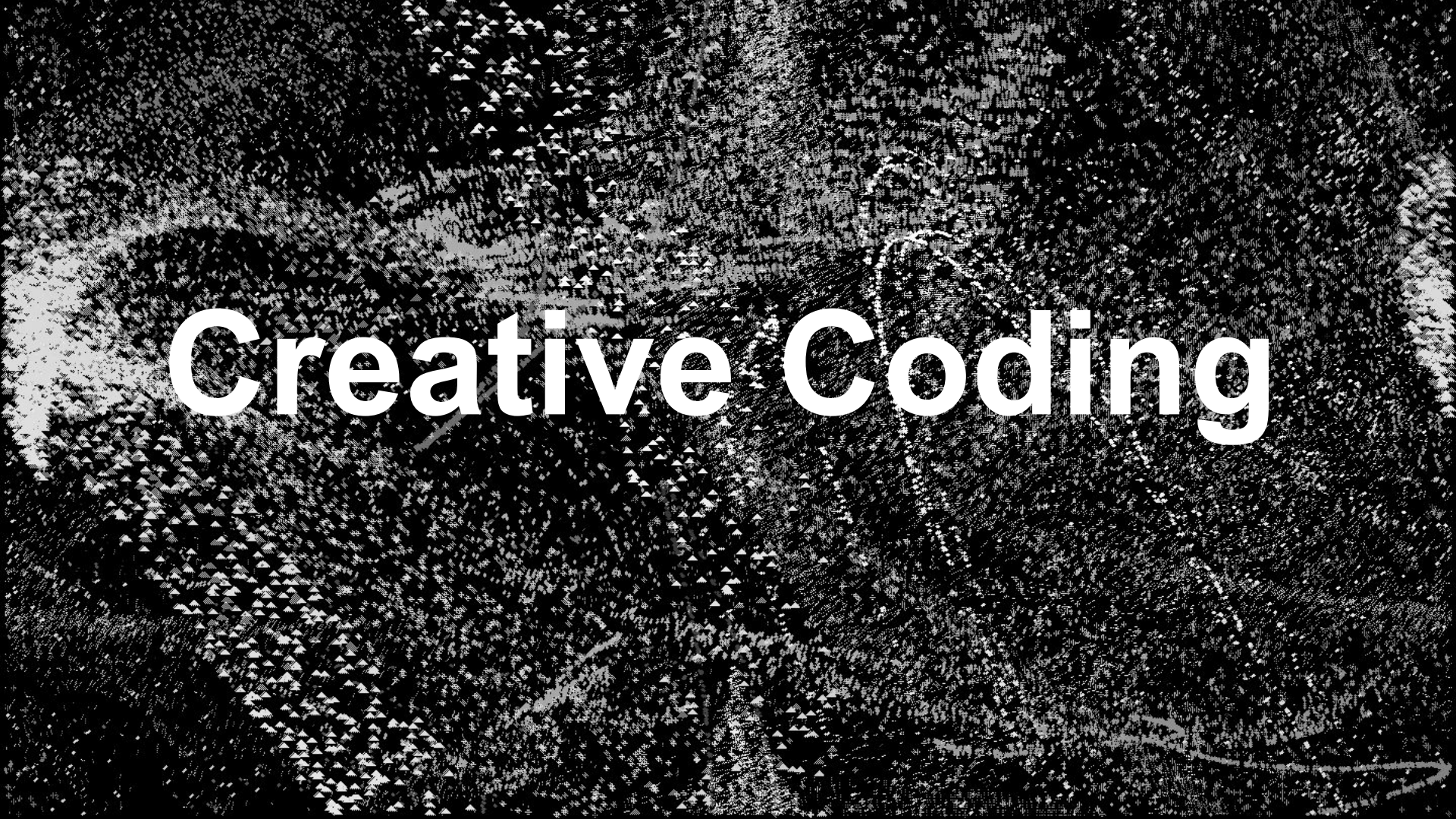


MAX

SysBas 1A | 12 september | Les 1

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Creative Coding



Creative Coding

is een vorm van programmeren
met als doel iets expressiefs te creëren,
i.t.t. iets functioneels.

Programmeertalen

C++ JavaScript Python Java Processing C
Scheme Lisp Reaktor Super-Collider Objective-C PHP HTML... etc.
en Max

**Welke taal je gebruikt hangt af van
de toepassing en context**



Max

Visuele Programmeeromgeving

Max wordt ontwikkeld door Cycling'74

<https://cycling74.com>

Demonstratie

Toepassingen

Studio / Productie

The image displays a DAW interface with four mixer channels and a Convolution Reverb plugin window.

Mixer Channels:

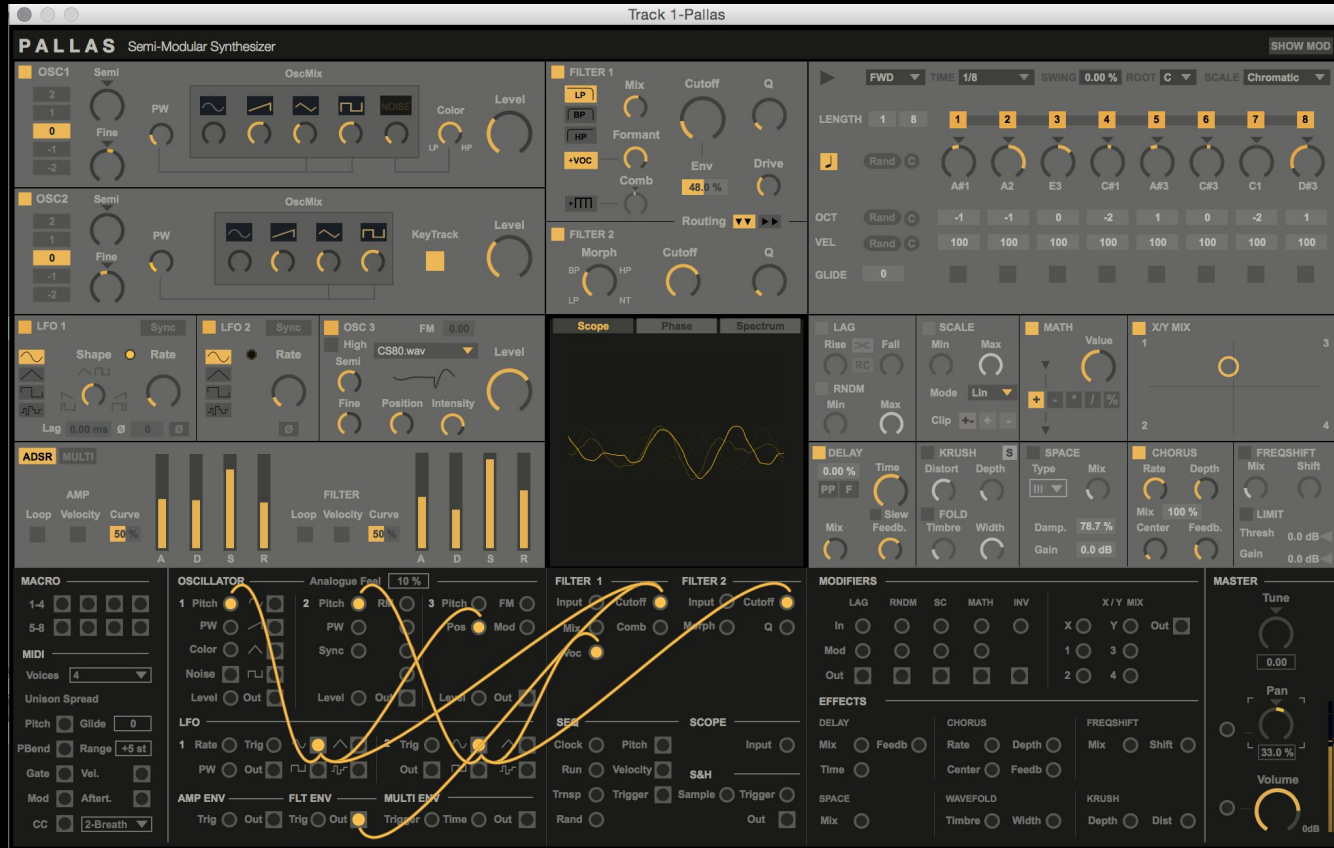
- Channel 1:** MIDI From: All Ins, All Channels, Monitor: In Auto Off, Audio To: Master.
- Channel 2:** MIDI From: All Ins, All Channels, Monitor: In Auto Off, MIDI To: No Output.
- Channel 3:** Audio From: Ext. In, 1, Monitor: In Auto Off, Audio To: Master.
- Channel 4:** Audio From: Ext. In, 2, Monitor: In Auto Off, Audio To: Master.

Convolution Reverb Plugin:

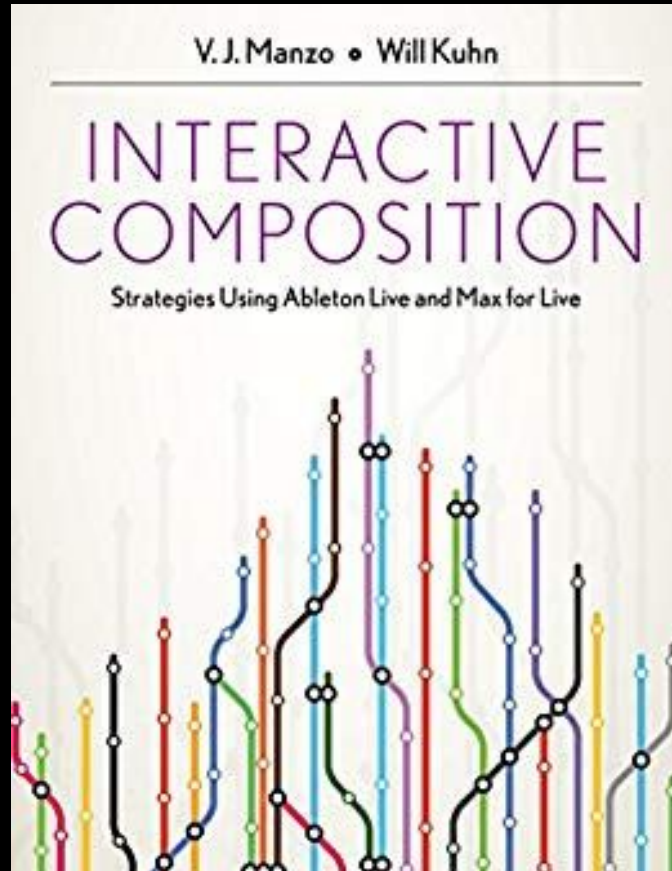
- Decay:** 100 %
- Size:** 100 %
- Predelay:** 0.00 ms
- Type:** 01 Real Places
- IR:** Arundel Nave
- EQ:** 10.00 kHz, 0.0 dB, 1.00
- Width:** 100 %
- Gain:** 0.0 dB
- Dry/Wet:** 50.0 %

The Convolution Reverb window also features a waveform display showing a decay curve over 5.27 seconds.

Sound Design / Instrumenten



Composiie



Sensors



leapmotion.maxhelp (root) Gestures fingers

leapmotion

Interface to the Leapmotion.
v0.1 | Based on Leap Motion SDK V2.1.4 Tracking Beta. <http://www.leapmotion.com/>
<https://developer.leapmotion.com/>

qmetro 10

leapmotion

end frame

p visu

gestures

p Gestures

fingers

p fingers

hands

p hands

s right-hand-id

s left-hand-id

frame info

unpack 0 0 0

begin frame

frame id

timestamp

numhands

right hand

select hand

type	right								
confidence	0.92								
numfingers	5								
numtools	0								
grabstrength	0.00								
pinchstrength	0.00								
palmwidth	86.57								
basis	0.78	-0.38	-0.49	0.59	0.70	0.40	0.19	-0.61	0.77
direction	-0.19	0.61	-0.77						
palmposition	92.04	178.40	-7.14						
palmvelocity	0.25	-0.06	-0.01						
palmnormal	-0.59	-0.70	-0.40						
wristposition	108.67	145.87	29.76						
elbowposition	213.80	-23.76	191.51						
spherecenter	-5.58	73.84	-82.53						
sphereradius	166.09								
translationpro	0.33								
translation	0.00	0.00	0.00						
scaleprobability	0.39								
scalefactor	1.00								
rotationproba	0.28								
rotationangles	0.00	0.00	0.00						

jit.pwindow: Show data in a patcher

A large-scale interactive light installation is displayed in a spacious, industrial-style warehouse. The installation features a large, glowing, spherical structure on the left, composed of numerous thin, radiating lines and small lights. To its right, a large, intricate, web-like structure hangs from the ceiling, made of thin, white, branching lines. Several people are interacting with the installation; some are standing and looking at the structures, while others are reaching out to touch them. The warehouse has a high ceiling with exposed beams and a concrete floor. The lighting is warm and focused on the installation, creating a dramatic effect.

Interactieve Installaties

Live Performance



Hardware

**‘of course,
since the programming is in Max
you can do pretty much
whatever you want with it’**

https://www.youtube.com/watch?v=KN_Z4N5fxpE

Context

- Artistiek
- Sociaal
- Wetenschappelijk
- Commercieel

**Wat heb je eraan
als je niet zelf gaat programmeren?**

Professioneel Muziektechnoloog

**Begrip van, en Communicatie met
andere Disciplines**

Deze lesreeks

- Tot de roostervrije week : Introductie en basis logica
- Tot Kerst : Algoritmen en een beetje audio
- Tweede semester : Meer audio en connectie met Hardware

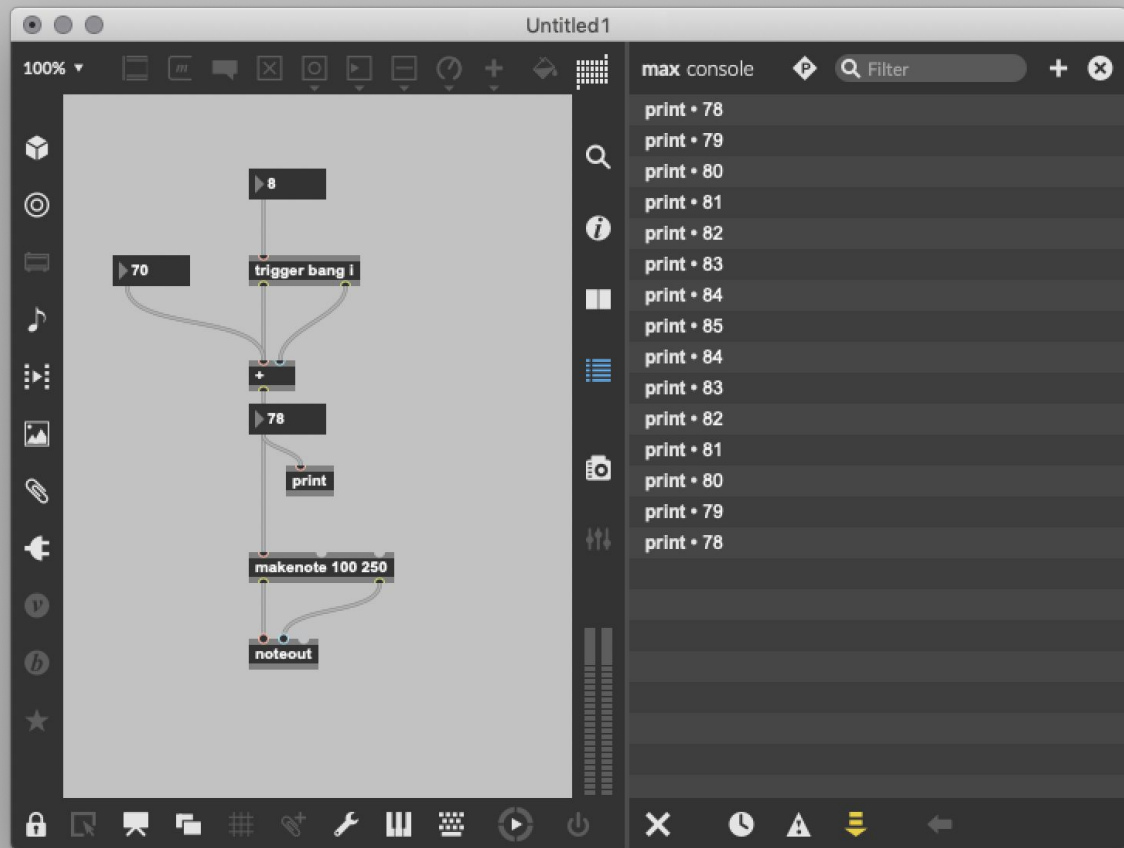
Doelen week 1 + 2

- Begrip Max
- Getting started
- Systeem: input > transformatie > output
 - Alle objecten samen vormen een systeem: de Patch
 - Elk object is ook weer een klein systeem in zichzelf (Functie)
- Eerste objecten

Vandaag

- Numberbox
- Operators: + * - / !- !/
- Print to Max window
- Hot & Cold inlet
- Trigger
- MIDI out

- Help files (alt + click object)



Practicum

<https://csd.hku.nl>

Lokaal: 1.35