

Canlı Kodlama ile Ses Üretimi

Selçuk ARTUT & Alp TUĞAN

Canlı Kodlama

Canlı kodlama (Live coding) ses ve görsel sanatlarda kullanılan yeni bir üretim yöntemidir.

Sanatçının üretimi, görsel/ses, fark etmeksizin ağırlıklı olarak doğaçlamaya dayanır.

Sanatçılar performansları sırasında yazdıkları kodları performanslarını sergilemek adına izleyiciye projeksiyonlar sunarlar.

Canlı Kodlama Kronolojisi

- İlk olarak 2000 yılında Londra'da Julian Rohrer yaptığı performans sırasında Super Collider yazılımını kullanarak bir performans sergilemiştir.
- 2002 ilk Canlı kodlama albümü yayımlandı.
- 2003 Chuck gibi canlı kodlama yazılımları geliştirildi/güncellendi
- 2004 Toplap.org ortaya çıktı.
- 2005 Toplap transmediale ve first live code battle
- 2007 LOSS Live Code Festival
- 2012: Live Notation AHRC: live arts and live coding
- 2013: Live Coding festival in Karlsruhe
-

Dünyada Canlı kodlama

[Toplap](#)

[Algorave](#)

Toplap organizasyonu 2004 yılında canlı kodlamayı tanıtmak ve yayılmasını sağlamak amacıyla kurulmuş kar amacı gütmeyen bir organizasyondur.

Toplap Manifesto

<https://toplap.org/wiki/ManifestoDraft>

Performans Örneği / RAW

RAW is an Istanbul based live coding duo creating Audio Visual Performances. Performances are composed of improvisational sonic structures accompanied with pre-programmed interactive visual materials. Visuals have been developed with core programming environments and various visual manipulations occur with data received from sound to interact with. Furthermore, RAW invites the audience to immerse into the performance visually with using additional top cameras, and code views projected on large displays. Sonically the audial experience moves into the fields of noise, electronic, techno, minimal and ambient genres with improvisational forms.

RAW Selected Live Performances:

- 14th SMC Conference, Espoo, Finland
- University of Richmond, Lecture Theatre, London, UK
- Designing Interfaces for Creativity Symposium: Attenborough Centre for Arts, Brighton, UK
- NANAHARI, Tokyo, Japan
- FARM 2016 (4th ACM SIGPLAN International Workshop on Functional Art, Music, Modelling and Design) Beverly Hills, Nara, Japan
- Klub 20/44, Serbia, Belgrade
- Maçka Elektrikli Müzik Günleri, Maçka, TR
- A.I.D Room No: 5, Kadıköy, TR
- AKBANK Sanat 1, Taksim, TR

Video Links: <https://vimeo.com/rawlivecoding> Web Site : <http://rawlivecoding.com>

Sonic Pi

Sonic Pi is an open-source programming environment, designed for creating new sounds with code in a live coding environment; it was developed by Dr Sam Aaron at the University of Cambridge.

Installation

Interface Warming

Sentezleme & Notalar

MIDI Note Numbers for Different Octaves

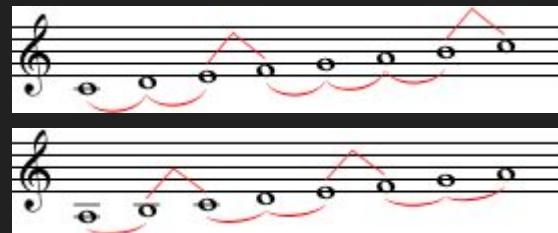
http://www.electronics.dit.ie/staff/tscarff/Music_technology/midi/midi_note_numbers_for_octaves.htm

play 60

sleep 1

Major Scale : whole, whole, half, whole, whole, whole, half

Minor Scale : whole, half, whole, whole, half, whole, whole



Synth Parametreleri

play 60, pan: -1, amp:1

List nedir? Veriyi tutmak

play 52

play 55

play 59

Yerine

play [52, 55, 59]

play [:E3, :G3, :B3]

Chords

```
play chord(:E3, :minor)
```

Live Loop

```
live_loop :foo do  
  play 60  
  sleep 1  
end
```

Sampling

sample :ambi_lunar_land

:ambi_

:bass_

:elec_

:perc_

:guit_

:drum_

:misc_

:bd_

External Samples

Raspberry Pi, Mac, Linux

sample "/Users/sam/Desktop/my-sound.wav", rate: 0.5, amp: 0.3

Windows

sample "C:/Users/sam/Desktop/my-sound.wav", rate: 0.5, amp: 0.3

Steve Reich - Violin Phase

