Workshop 02
What is Live Coding?
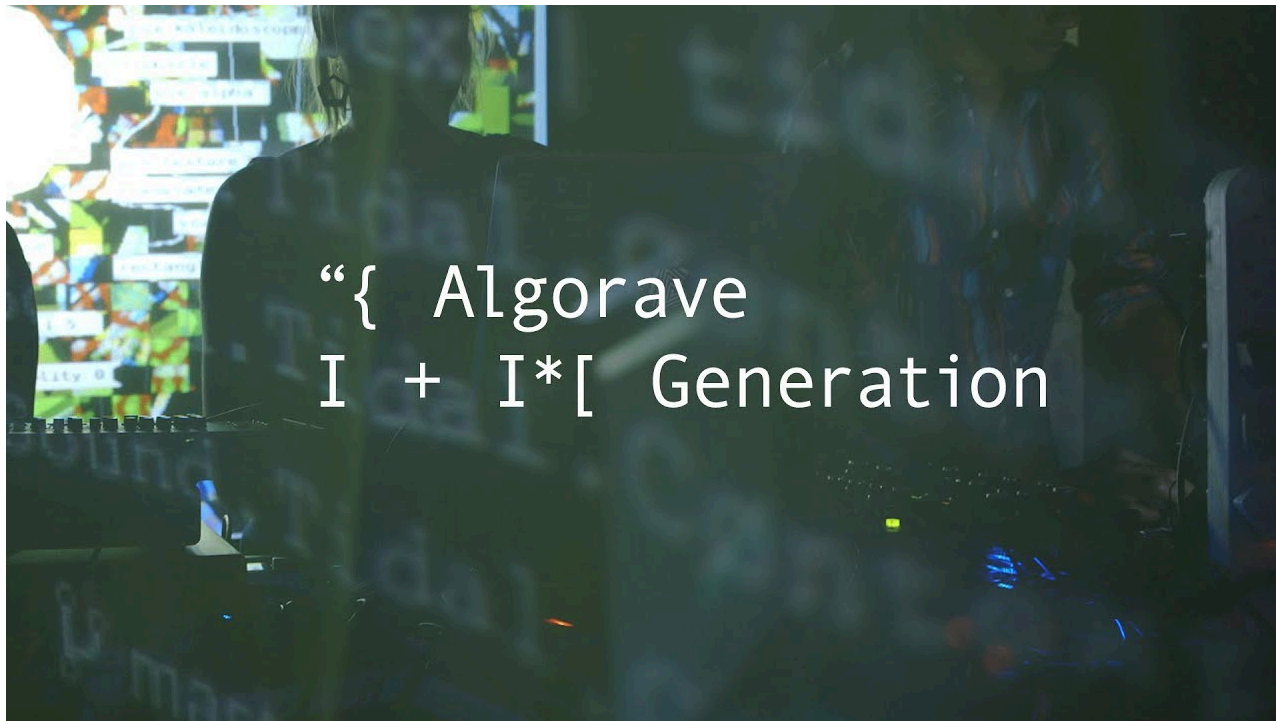
Atsushi Tadokoro

Introduction

Introduction

Algorave Generation | Resident Advisor

https://youtu.be/S2EZqikCIfY

Live coding

Live coding

Various Terms

- Live programming
- Interactive programming
- On-the-fly programming
- Performative programming
- ascii music…

Live coding

This time, we will focus on the "live" aspect
and use the term **Live coding**

First, let's consider the meaning of "live"

Live - Live Editing of Code

Live - Live Editing of Code

Interpreter-based programming languages

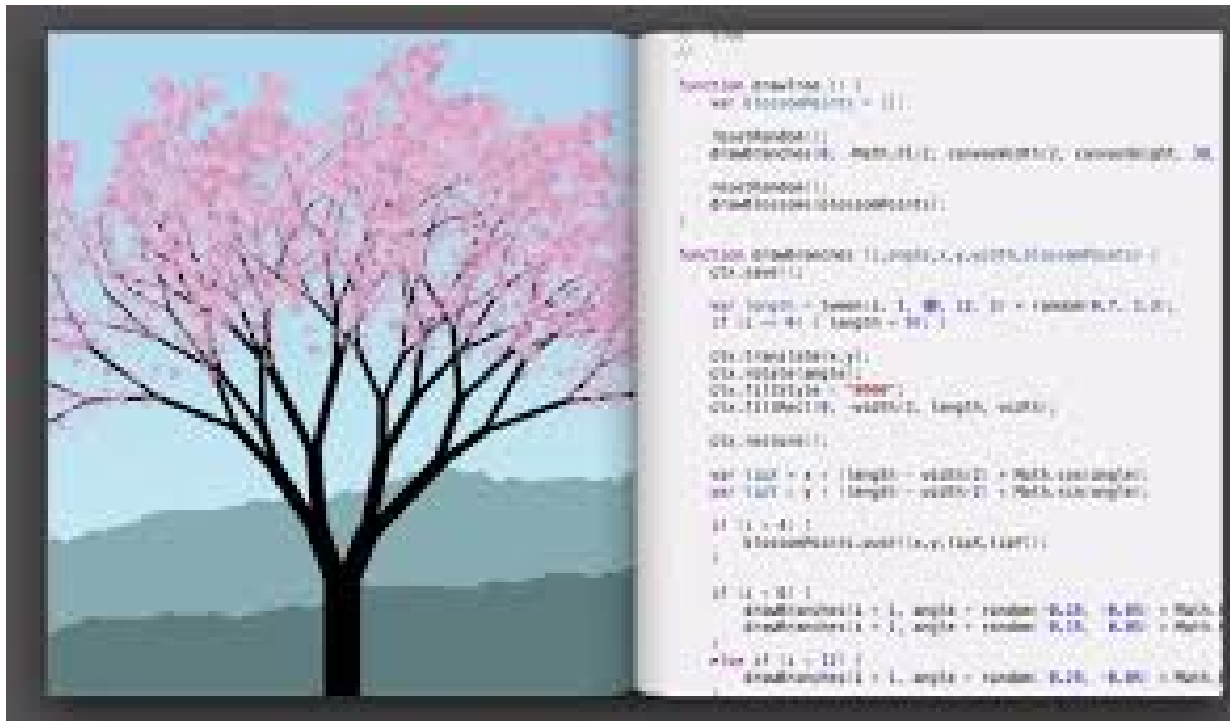- LISP (1962)
- LOGO (1965) - Turtle graphics

Turtle graphics

Live - Live Editing of Code

New trends in programming development environments

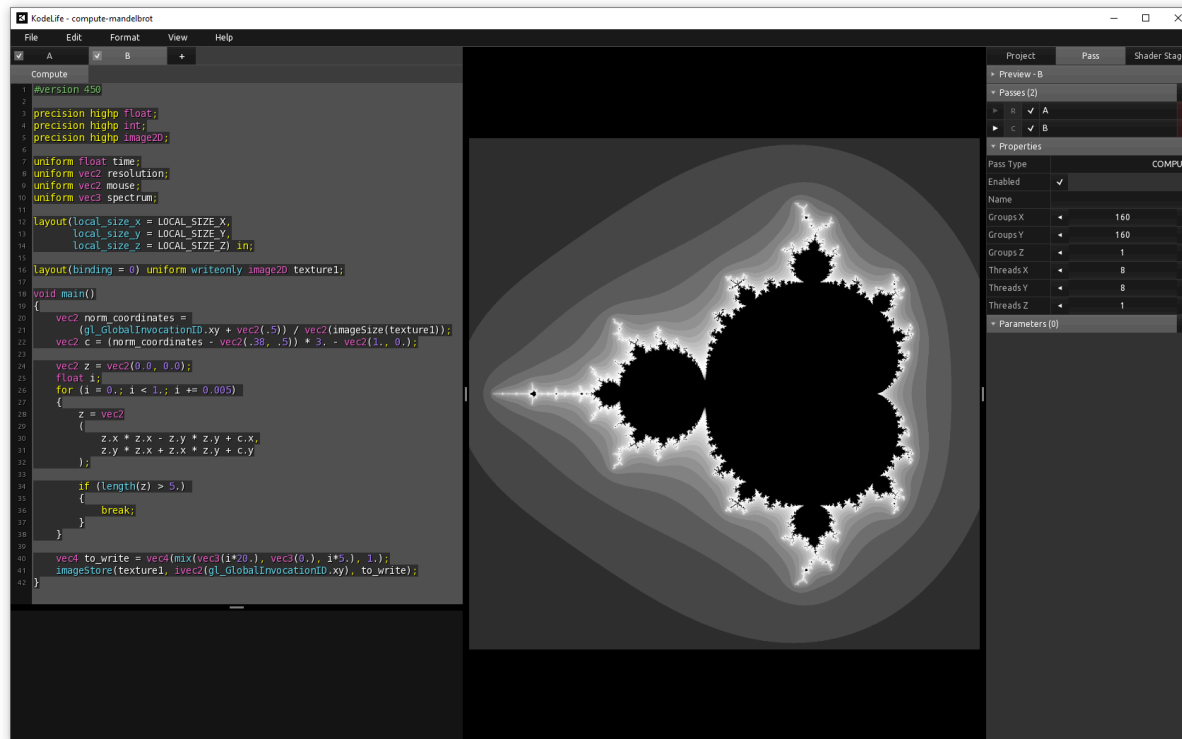Bret Victor - Inventing on Principle

Live - Live Editing of Code

p5.js editor

Live - Live Editing of Code

Kodelife

Live - Coding as a Live Performance

Live - Coding as a Live Performance

- Another meaning of "live"

  - Coding as a live performance

- Various attempts have been made in live music performance

- "Live electronic music"

Live - Coding as a Live Performance

1990's Laptronica (Live electronic music)

Farmers Manual

Live - Coding as a Live Performance

This trend continues today

Example: Mark Fell - Mark FELL_Concert PRESENCES électronique 2014

https://youtu.be/s15wdk2xQik

Live - Coding as a Live Performance

However, there was a problem…
What are they actually doing? Are they really performing?

Compare two videos
Kraftwerk - Pocket Calculator
https://youtu.be/UZiTr4hwHXI?si=ZkCJfKEeqSVAL-jn
https://www.youtube.com/watch?v=K_pxAVULNEw

Live - Coding as a Live Performance

"Show Us Your Screens"

A key concept in live coding

https://vimeo.com/20241649?share=copy

Live - Coding as a Live Performance

Slub (2000) : Adrian Ward, Alex McLean, Dave Griffith

Started experimenting with projecting the programming process onto a screen during performances

http://slub.org/

Live - Coding as a Live Performance

SLUB Live Coding performance Aarhus Kunsthal
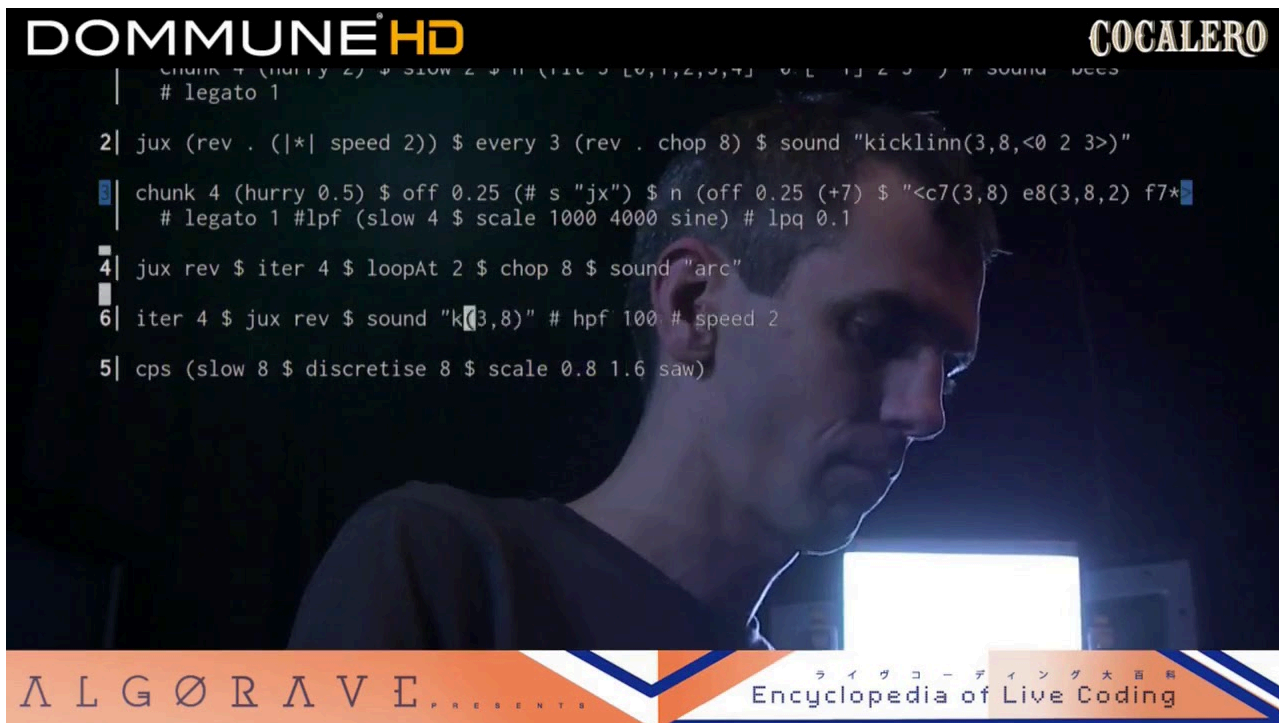
Alex McLean, Dave Griffiths

https://youtu.be/Z-8DX7g2zEc

Live - Coding as a Live Performance

Alex McLean (Yaxu) live on DOMMUNE

Alex McLean's performance at DOMMUNE during his 2018 visit to Japan

https://www.youtube.com/watch?v=dIpzU71LAQQ

Live - Coding as a Live Performance

NIME 2016 'Barely a Piano' by Andrew Sorensen

https://vimeo.com/176422744

Live - Coding as a Live Performance

Renick Bell, live @ Tama Art University

Nov. 27 2013, Tokyo Japan

https://youtu.be/BvXUK6FXPu8

The Live Coding Community

- TOPLAP (2004) : The live coding community
- https://toplap.org/

Algorave

- Algorave = algorithm + rave
- Parties centered around performances using live coding
- https://algorave.com/

TOPLAP Manifesto

http://toplap.org/wiki/ManifestoDraft

- Give us access to the performer's mind, to the whole human instrument.

- Obscurantism is dangerous. **Show us your screens.**

- Programs are instruments that can change themselves

- The program is to be transcended - Artificial language is the way.

- Code should be seen as well as heard, underlying algorithms viewed as well as their visual outcome.

- Live coding is not about tools. Algorithms are thoughts. Chainsaws are tools. That's why algorithms are sometimes harder to notice than chainsaws.
25

Now, let's actually experience live coding!