

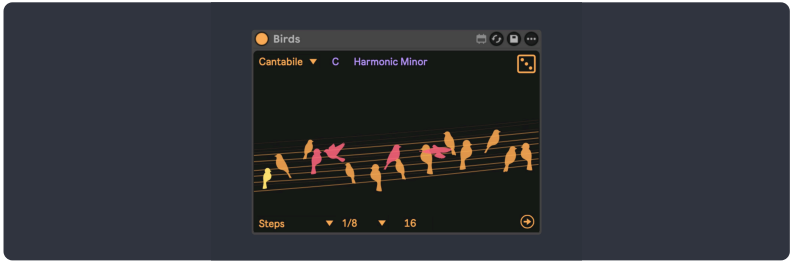
# Alessandro Miracapillo

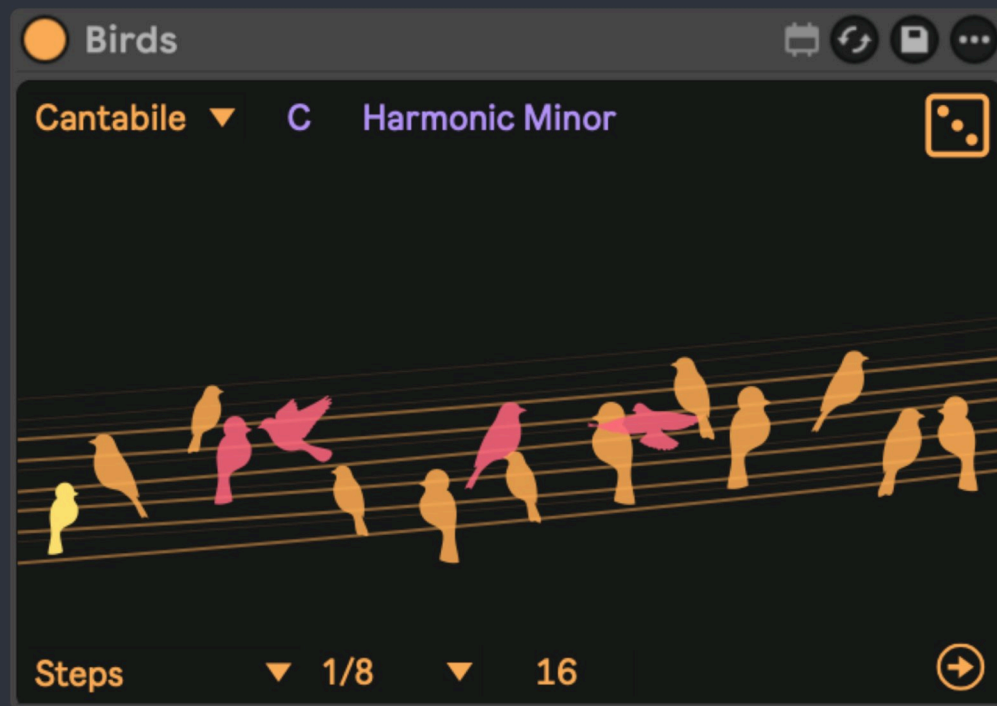
Design engineer

Interfaces for music software and the web.

ay@alessandromiracapillo.com  
aylesim.com  
github.com/aylesim  
Berlin

|    |                                                                                          |       |
|----|------------------------------------------------------------------------------------------|-------|
| 02 | <b>Birds</b><br>Generative MIDI sequencer, Max for Live                                  | 2026  |
| 03 | <b>Knob Studio</b><br>Modulation and mapping device, Max for Live                        | 2024  |
| 04 | <b>Aylesim Devices</b><br>Max for Live devices, own label                                | 2018– |
| 05 | <b>Planetary Compendium, North Sea chapter</b><br>Berggruen Institute / Dark Matter Labs | 2025  |
| 06 | <b>Glossia</b><br>Text to node graph, proof of concept                                   | 2026  |
| 07 | <b>ShapeLLM</b><br>Text to 3D shape, proof of concept                                    | 2026  |





Birds in Ableton Live. Image: aylesim.com

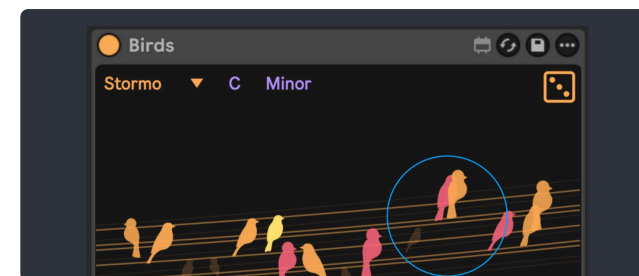
AYLESIM DEVICES · MAX FOR LIVE

## Birds

|       |                                             |
|-------|---------------------------------------------|
| ROLE  | Design, code, user manual                   |
| YEAR  | 2026                                        |
| TOOLS | Max/MSP, JavaScript, Max for Live, Live API |
| PRESS | Rekkerd, April 2026                         |

Generative MIDI sequencer for Ableton Live. Plays a 16-step melody and changes it in real time.

Each note is a bird on one of 12 wires, one wire per pitch. Click a bird to turn its note on or off. Notes that drift from the original sequence change colour.



From the manual: yellow is an original note, red has drifted, faded is muted.

[aylesim.gumroad.com/l/birds](https://aylesim.gumroad.com/l/birds)  
Manual (PDF), [isotonikstudios.com](https://isotonikstudios.com)



Mapping panel open. Image: Attack Magazine shop

AYLESIM DEVICES · MAX FOR LIVE

# Knob Studio

|       |                                         |
|-------|-----------------------------------------|
| ROLE  | Design and code                         |
| YEAR  | 2024                                    |
| TOOLS | Max/MSP, gen~, JavaScript, Max for Live |
| PRESS | Rekkerd, August 2024                    |

Modulation device for Ableton Live. Up to four functions are layered into one waveform. Reading heads move along it and send the values to mapped parameters.

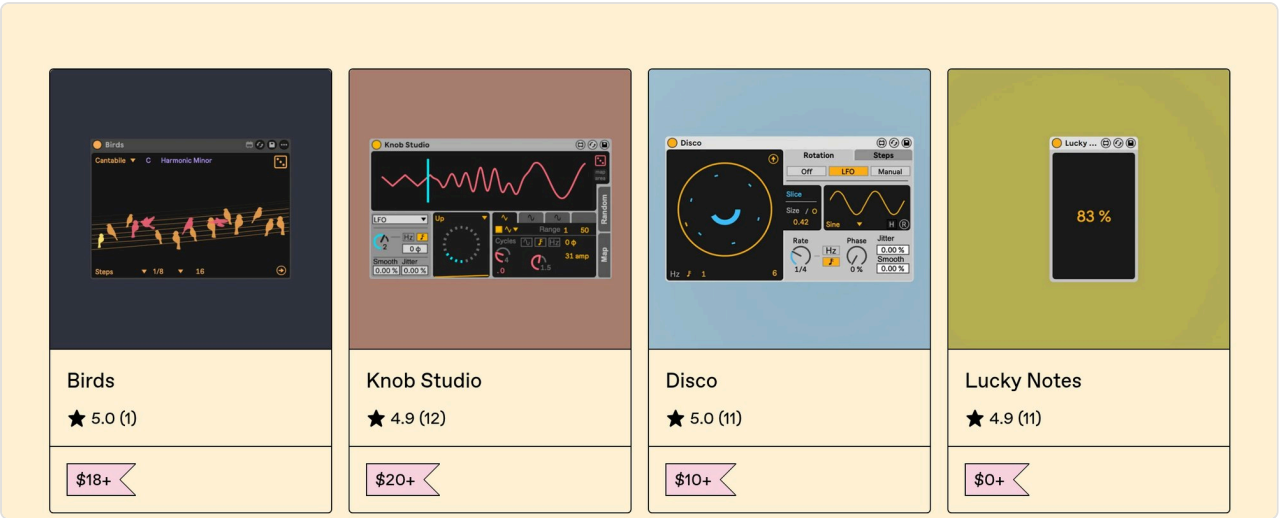
Waveform display at the top. The heads move by hand, by LFO or by envelope follower. A dice button randomises the functions.

DSP in gen~, UI in JavaScript.



Image: aylesim.com

Sold in Attack Magazine's shop:  
[store.attackmagazine.com/products/knob-studio](https://store.attackmagazine.com/products/knob-studio)  
[aylesim.gumroad.com/l/knobstudio](https://aylesim.gumroad.com/l/knobstudio)



Gumroad store, October 2026

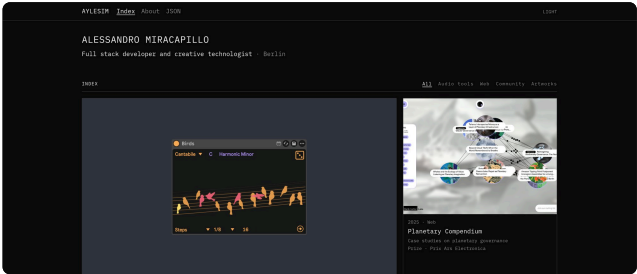
OWN LABEL

# Aylesim Devices

|         |                                                               |
|---------|---------------------------------------------------------------|
| ROLE    | Founder. Design, code, manuals, support                       |
| YEARS   | 2018 to now                                                   |
| DEVICES | Birds, Knob Studio, Disco, Freesound4Live, Lucky Notes (free) |
| REACH   | 3,700+ downloads and sales on Gumroad                         |
| SITE    | aylesim.com, built by me                                      |

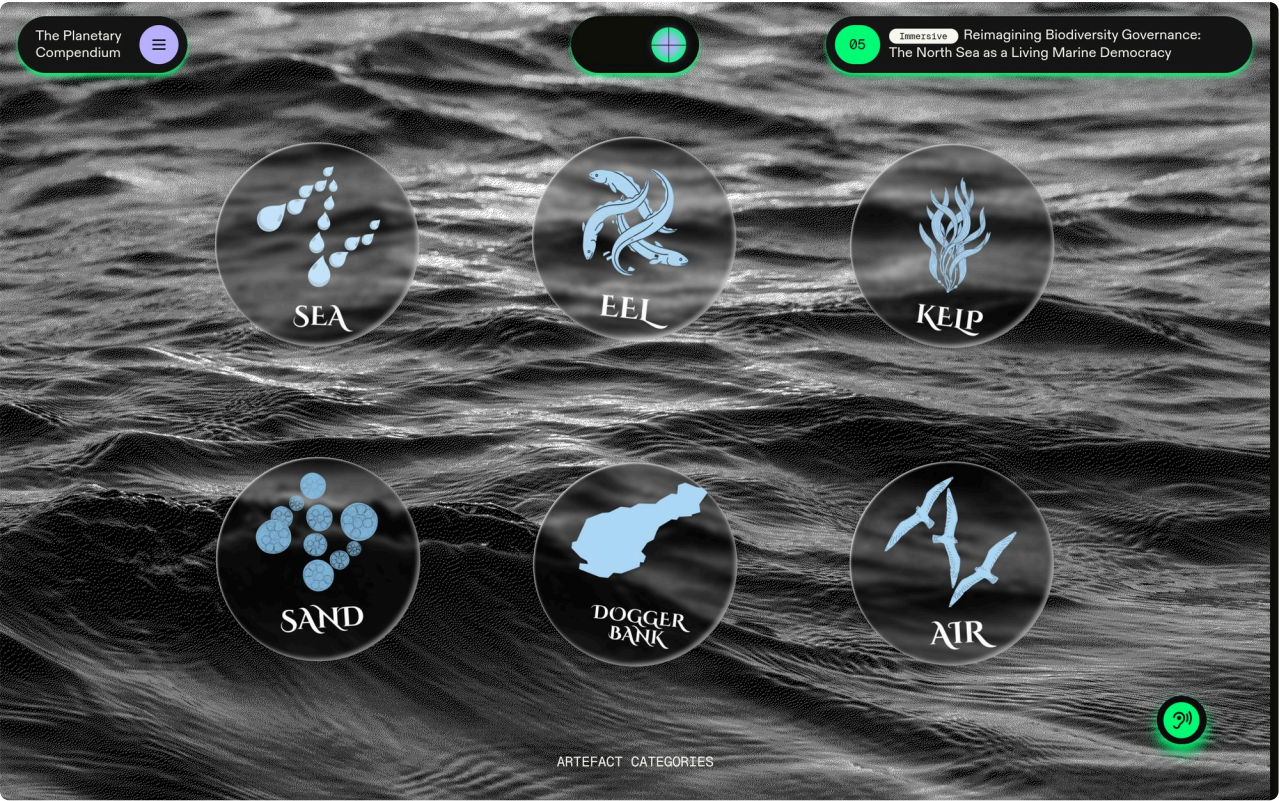
Label for my Max for Live devices, running since 2018.

I answer all user feedback and build requested features. Most improvements started as user requests.

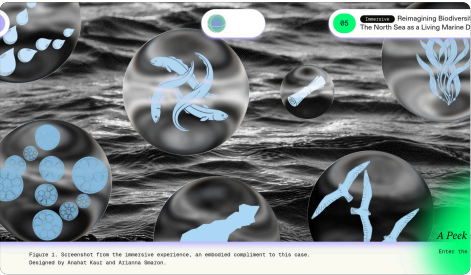


aylesim.com, October 2026

aylesim.com  
aylesim.gumroad.com



Immersive part of the chapter. Screenshot: [governtheplanet.org](https://governtheplanet.org)



The chapter's case page.

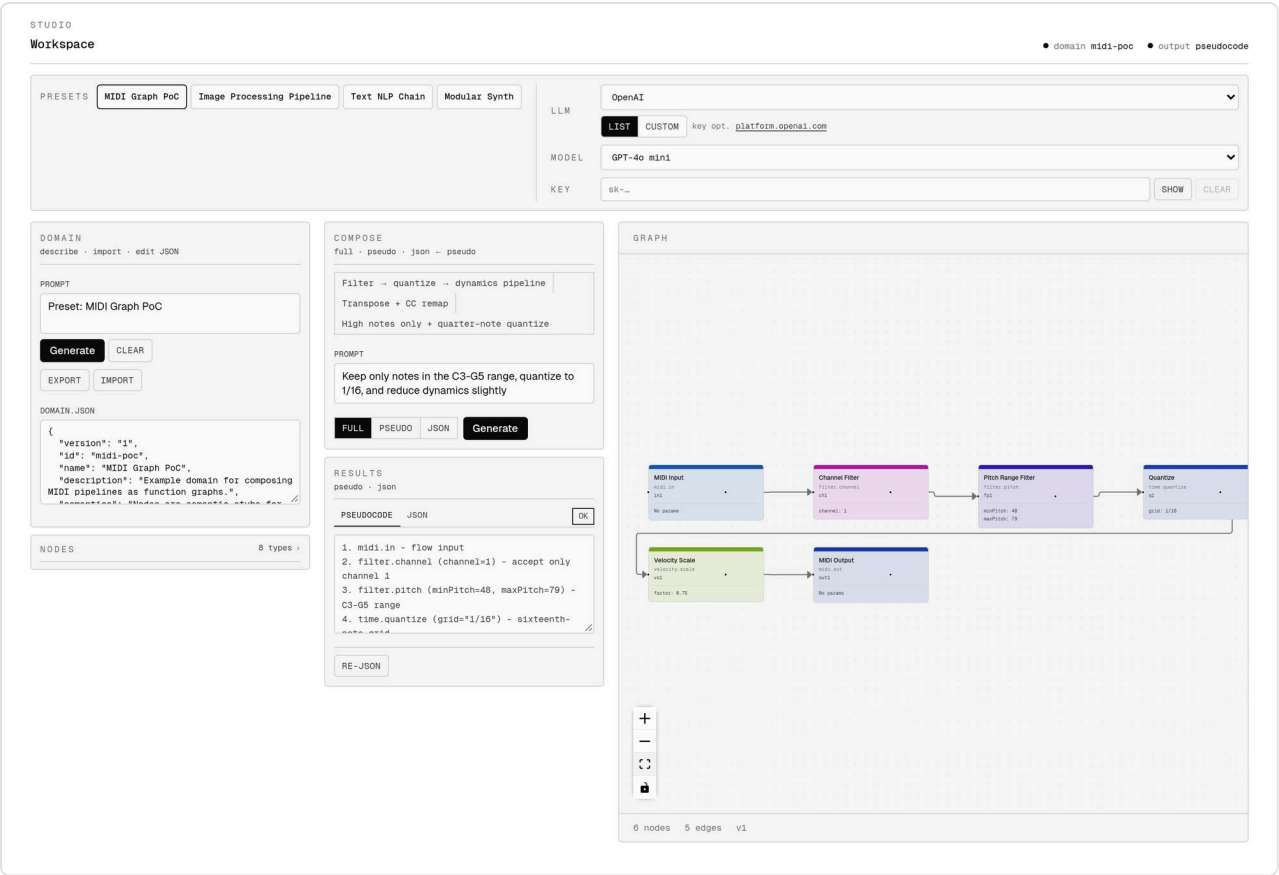
CLIENT WORK · BERGGRUEN INSTITUTE / DARK MATTER LABS

# Planetary Compendium: North Sea chapter

|        |                                                                              |
|--------|------------------------------------------------------------------------------|
| ROLE   | Front-end developer (freelance)                                              |
| CREDIT | Design: Anahat Kaur, Arianna Smaron. Development: me.                        |
| YEAR   | 2025                                                                         |
| TOOLS  | Next.js, React, TypeScript, Figma                                            |
| AWARD  | Prix Ars Electronica 2026, Honorary Mention, Digital Humanity (team project) |

Case studies on planetary governance by the Berggruen Institute and Dark Matter Labs. The North Sea chapter is a scrollytelling piece, built from the designers' Figma files.

[governtheplanet.org/case-study/north-sea](https://governtheplanet.org/case-study/north-sea)



Built-in MIDI example, before any generation. glossia-seven.vercel.app, October 2026

PERSONAL PROJECT

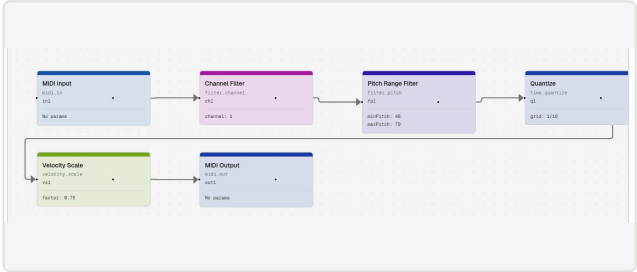
# Glossia

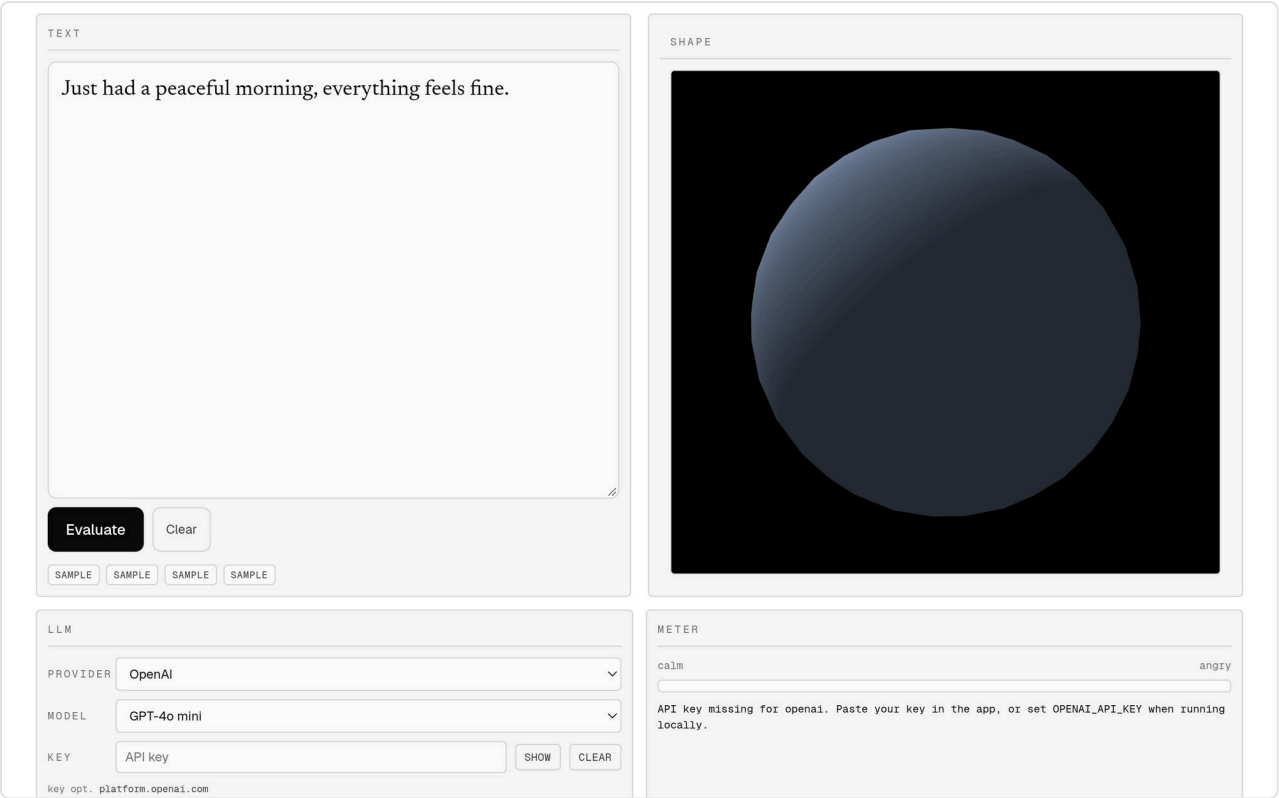
|        |                                                                    |
|--------|--------------------------------------------------------------------|
| ROLE   | Development                                                        |
| YEAR   | 2026                                                               |
| TOOLS  | Next.js API routes, React, TypeScript, zod, React Flow, OpenAI SDK |
| STATUS | Proof of concept                                                   |

Turns a plain-language workflow description into a node graph. A domain file defines the allowed node types, ports and parameters.

The LLM writes pseudocode first, then graph JSON. zod validates the JSON against the graph schema and the active domain. React Flow renders only validated JSON.

No workflow execution.





Demo at rest, before any text is scored. shape-llm.vercel.app, October 2026

PERSONAL PROJECT

# ShapeLLM

|        |                                                     |
|--------|-----------------------------------------------------|
| ROLE   | Development                                         |
| YEAR   | 2026                                                |
| TOOLS  | Next.js API route, React Three Fiber, three.js, zod |
| STATUS | Proof of concept                                    |

An LLM rates how angry a text sounds, from 0 to 1. A three.js shape gets sharper and redder as the score rises.

The call goes through a Next.js API route. zod validates the request and the model's reply.

Live demo requires an OpenAI or OpenRouter key.

[shape-llm.vercel.app](https://shape-llm.vercel.app)  
[github.com/aylesim/ShapeLLM](https://github.com/aylesim/ShapeLLM)