

Chi ha
ucciso
il Conte?

UX/UI Design
Digital Fabrication
Research

Portfolio

BIO - "Chi Ha Ucciso il Conte?" is a **designer**, **FLOSS advocate** and **researcher** based in Parma (Italy), where he operates his own **digital fabrication** lab. He specializes in designing electronic music instruments and media art installations, collaborating with artists, companies and institutions and sound installations across the world

My work has been featured in **over 500 performances and installations** at prestigious venues and festivals, including the **CTM Festival** (Germany), **KIKK Festival** (Belgium), **the National Museum of Modern Art in Kyoto** (Japan), and the **Bauhaus 100 Festival**. It has been showcased in **185 cities** worldwide.

This portfolio contains a selection of my works, to find more information about me and my work you can explore my website and my social media profiles at the following links:

www.chihauccisoilconte.eu

Email - chihauccisoilconte@gmail.com

Instagram - [@chihauccisoilconte](https://www.instagram.com/chihauccisoilconte)

Facebook - <https://www.facebook.com/ChiHaUccisoilConte/>

Mastodon - <https://c.im/@chihauccisoilconte>

Linkedin - <https://www.linkedin.com/in/nicolo-merendino/>

Github - <https://github.com/chihauccisoilconte>

Chi ha ucciso il conte?

"Below 58BPM" is an IoT system created to monitor opera singers' heart rates in real time, providing feedback and sound effects to assist in managing stress during performances. It detects the singer's heartbeat via a pulse sensor and provides augmented tactile feedback. When stress is detected, singers can switch from intense opera techniques to deep breathing or less demanding techniques to rest or engage in a self-healing session.

The wearable component is a collar designed for comfort, worn over a scarf, and equipped with a pulse sensor, knobs, LEDs, and a vibration motor. It allows singers to manage their performance by controlling sound effects and provides ease of use with Velcro closures and a USB charging option

My role involved designing and building the interface using digital fabrication techniques, programming the microcontroller, and creating the Pure Data sketch for the system.

The project was used for a research project entitled..

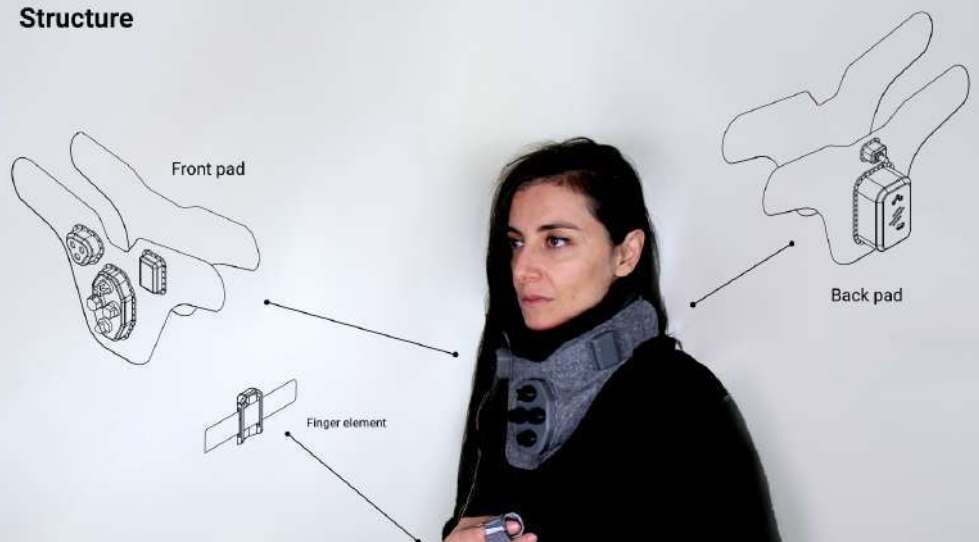
"Below 58 BPM," involving real-time monitoring and self-medication practices in music performance through IoT technology



UX



Structure



Below 58 BPM

made for Eleonora Amianto

Chi ha ucciso il Conte?

Komorebi is a swarm of artificial creatures that create music in response to the sun, clouds, and tree shadows. The name comes from the Japanese word for "sunlight shining through trees." It invites us to experience the play of light and shadow as music, suggesting that "life" can be a property of complex systems beyond biological life.

The project explores how to create spatial electronic music that blends with nature and helps us tune into its constant changes. Unlike digital artworks experienced through screens, Komorebi's physical agents interact through signals filtered by space, giving it a unique presence in the same space as the audience.

Presented in parks, gardens, or forests, the 100 electronic creatures respond to their surroundings—light, sounds, weather—creating ever-changing spatial music. Visitors can walk around to hear how the music shifts or sit and listen as it evolves.

The Komorebi project was a large-scale endeavor involving many professionals. My contribution involved assisting the artist with designing and 3D modeling the devices, as well as supporting the process of writing the funding application in the very early stages of the initiative

More info can be found at
matteomarangoni.com/Komorebi-page



Komorebi

Made for Matteo Marangoni and Dieter Van Doren

Chi ha ucciso il Conte?

The NanoAetherphone is a musical instrument designed to reinvent and celebrate the Theremin on its 100th anniversary.

The characteristics of the Nano Aetherphone are devised to offer artists the same sound possibilities as the Theremin, while also guaranteeing a wider range of options in terms of stage mobility and performance.

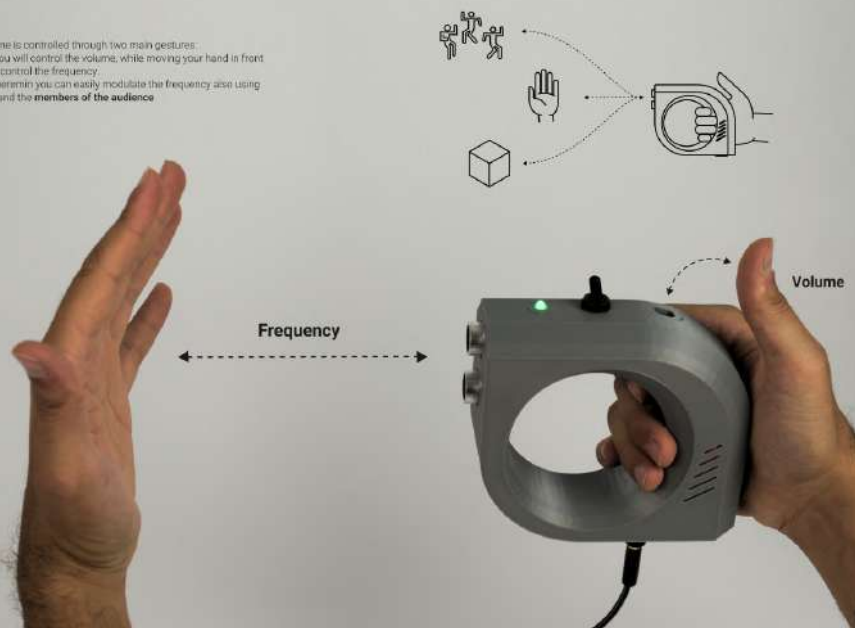
The interface functions as a digital and compact instrument, and it can be personalized according to the artist's needs and ways of making music. The design is based on a torus shape that deforms slightly to allow all the electronic components to fit smoothly in a position that is ergonomic and elegant.

The default sound setting of the Aetherphone Nano consists of a sine wave oscillator with three echo effects. Use it directly as a freestanding instrument or enhance its range of sounds by combining it with pedals and effects of your choice. Being based on open hardware and open software, the artist can disassemble the instrument and recode the program to customize wave shapes and frequencies, sensor calibration, and other specifics.



Interaction(s)

The Nano Aetherphone is controlled through two main gestures: By moving a thumb you will control the volume; while moving your hand in front of the device you will control the frequency. Unlike a traditional Theremin you can easily modulate this frequency also using unanimated objects and the members of the audience.



Open source

The Nano Aetherphone is an open source instrument. The shell is designed in such a way that is easy to open and hack. The code is based on Arduino, and the circuit and the schematics are available for everyone here: https://github.com/chisauccosaitonite/aetherphone_nano.

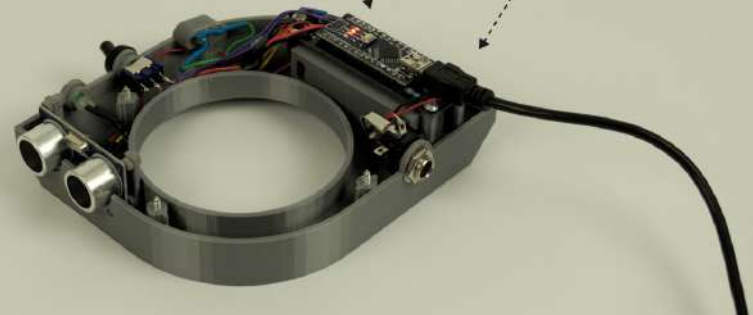
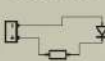
Circuit



Code

```
void setup() {  
  pinMode(10, OUTPUT);  
  pinMode(13, OUTPUT);  
}  
  
void loop() {  
  digitalWrite(10, HIGH);  
  digitalWrite(13, LOW);  
  delay(1000);  
}
```

Schematic



Nano Aetherphone

Chi ha ucciso il Conte?

The Akselfon is a musical instrument designed to allow everyone to play music.

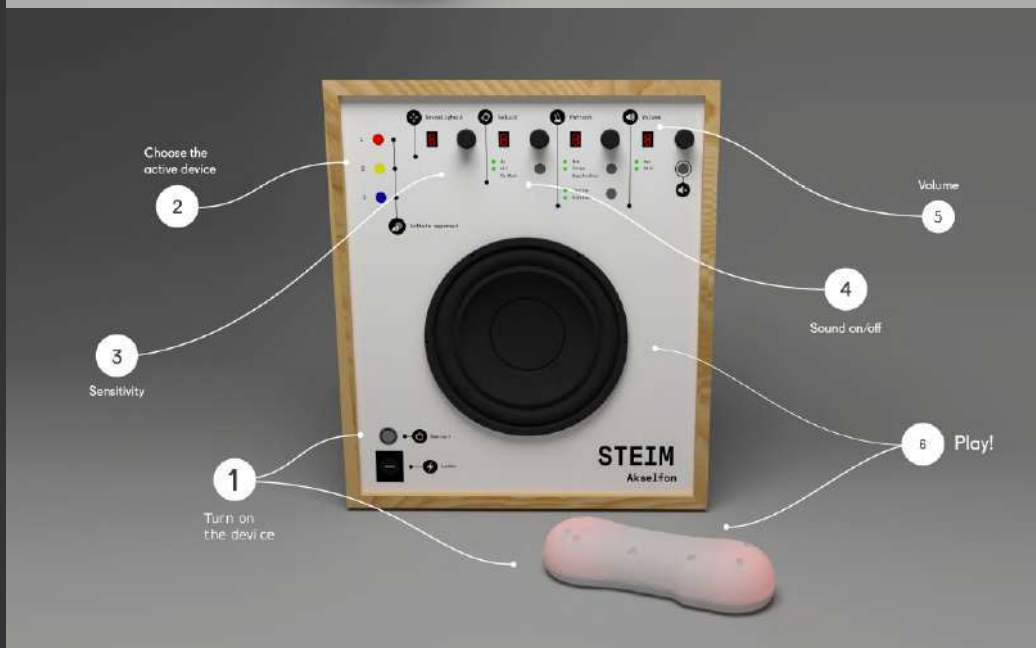
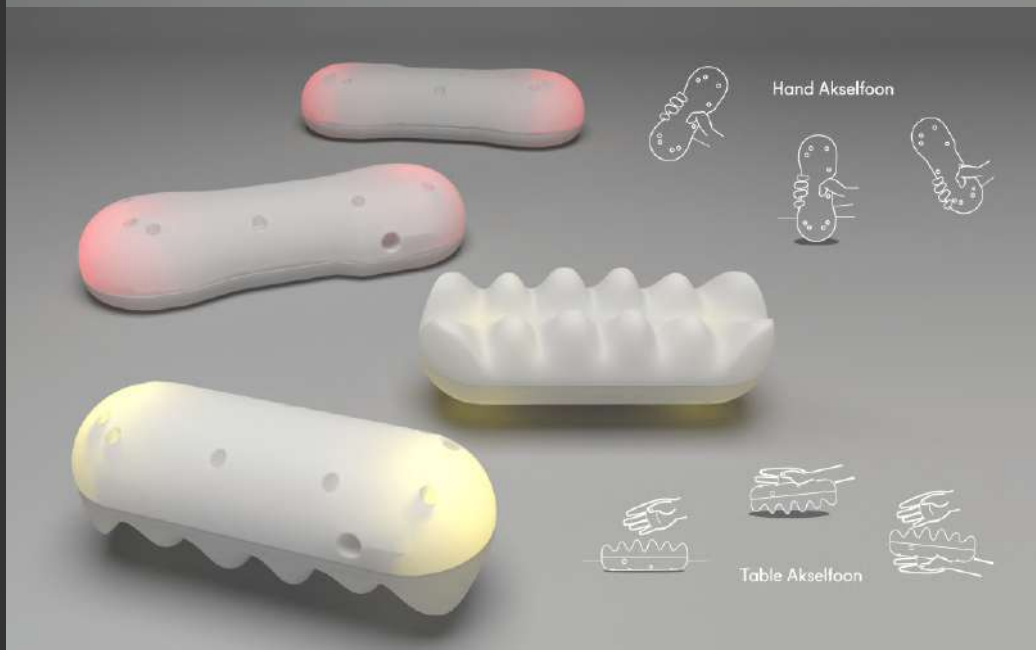
The set is composed of two elements:

The control box and the Akselfoons themselves.

The philosophy that has driven us in the design is that people affected by disabilities must also be able to express themselves through the use of their body.

All the materials used are completely non-toxic, allowing users to play freely without being afraid of hurting themselves or damaging the instrument.

The Akselfoons are the instruments the user performs with. The shapes are designed to be comfortable to use, waterproof, and easily washable. In order to cater to a large number of users with a minimum quantity of variations, we developed two shapes: one is to be held in the hand, and the other is mainly designed to be used on top of a table.



More info:
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Akselfoon

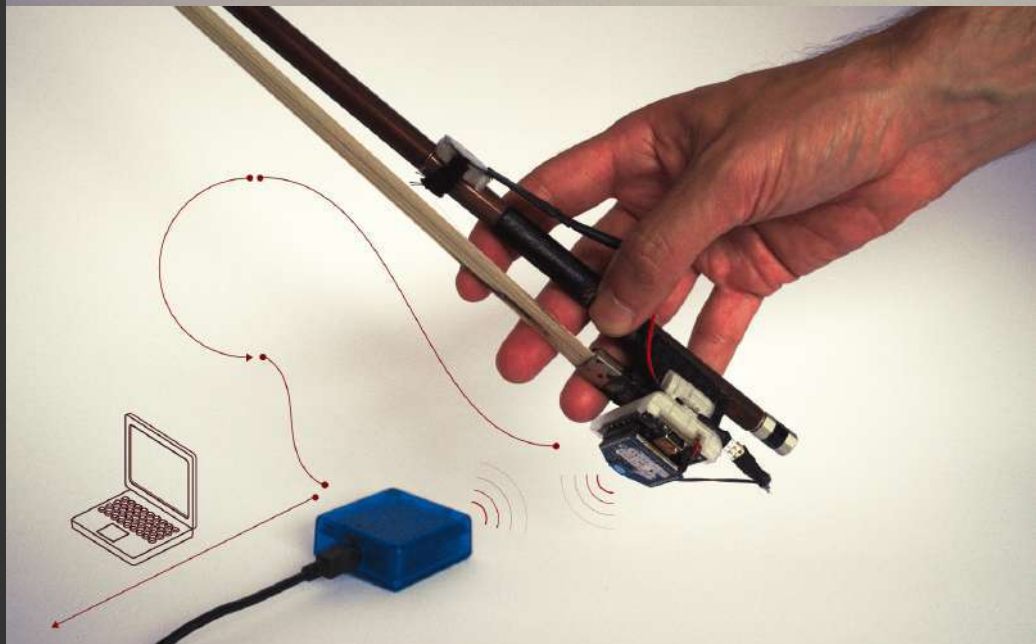
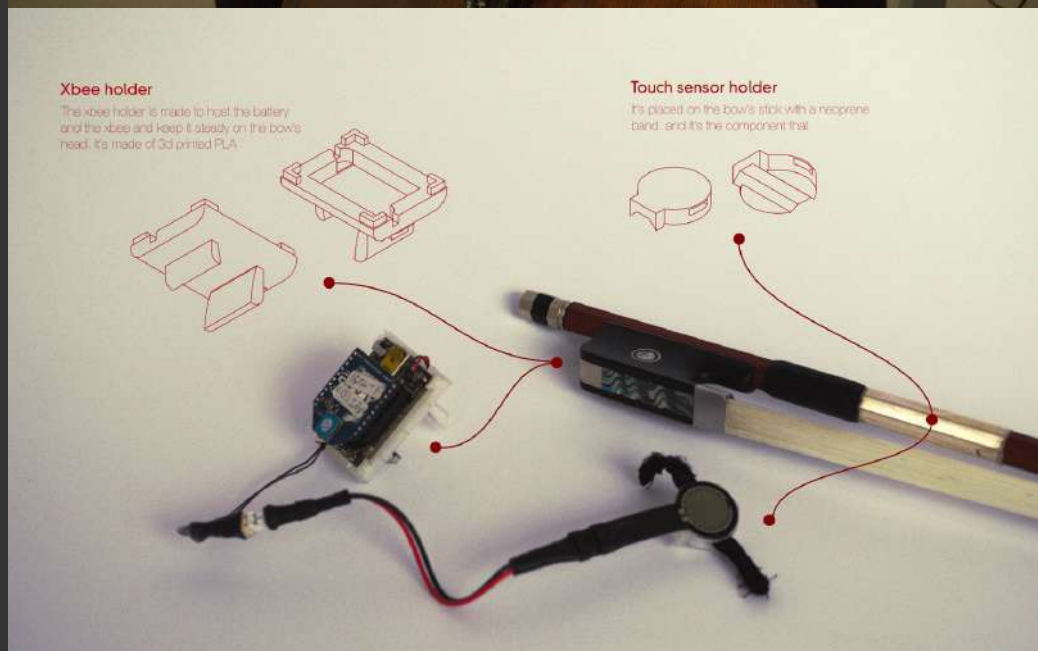
Made for STEIM

Chi ha ucciso il Conte?

Fello is Andi Otto's unique setup for musical performance. It connects the cello and the computer as one instrument, using the bow as a special interface. The bow is used to play the cello in the traditional way, but in Fello, it also holds a set of sensors that measure the movement and acceleration of the bow, as well as the applied finger pressure. This data is used to control audio software that tweaks the amplified cello sound directly in relation to Andi's hand and arm gestures.

Fello has been developed at STEIM in Amsterdam since 2007, using their junXion software for the data-to-sound mappings. Byung-Jun Kwon and Marije Baalman engineered the sensors and the wireless receiver. CAD and 3D prints have been made by "Chi Ha Ucciso il Conte?" (me). The setup includes a MIDI Controller (BCR 2000) to change the functions of the bow sensors, two foot pedals for the same reason, and the "NI Maschine" Drum machine.-

More info:
chihauccisoilconte.eu



Fello

Made for Andi Otto

Chi ha ucciso il Conte?

Strophonion is a physical voice controller designed by Florian Gotke and Alex Nowitz in 2010-11 at STEIM. In 2014, after a few years of testing,

Alex asked Sukandar Kartadinta and me to build a backup instrument and improve the design of his instrument.

The new version of the "Strophonion" is lighter and shaped in a more organic way. It is made using 3D printing technology.



Left hand controller

Made to perfectly fit on Alex's left hand. Also made of 3D printed PLA plus some cork element and a velcro band.



Right hand controller

Made to perfectly fit on Alex's right hand. It's made of 3D printed PLA plus some cork element and a velcro band.



More info:
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Strophonion

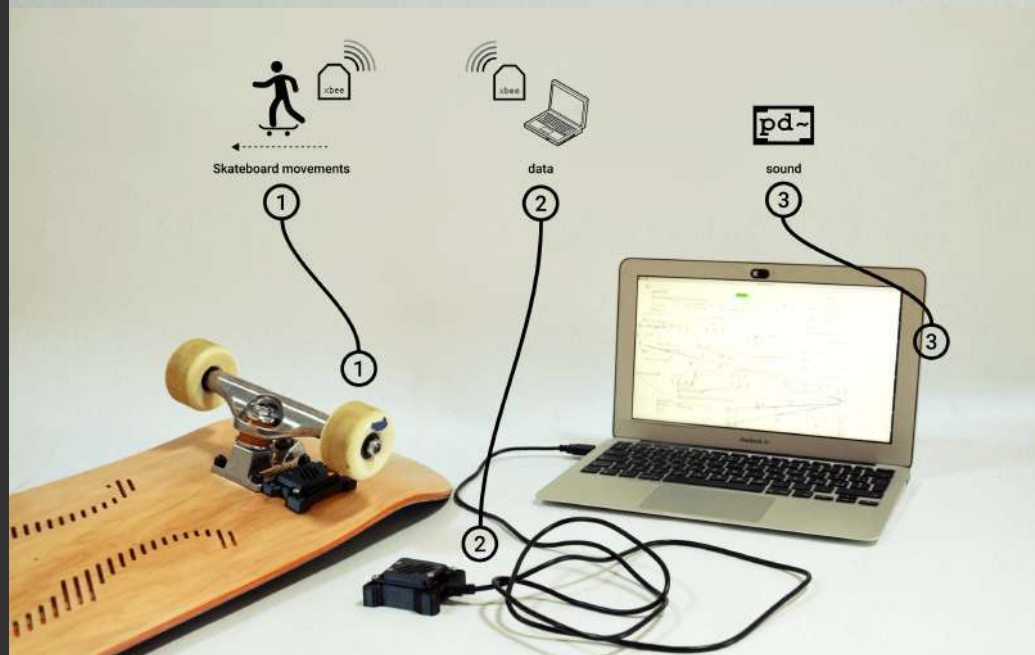
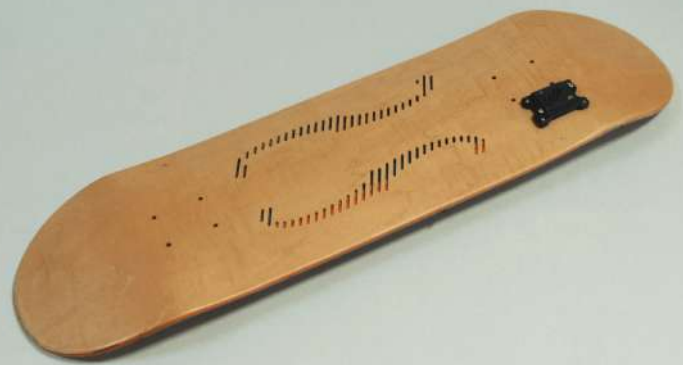
Made for Alex Nowitz

Chi ha ucciso il Conte?

Noiseboard is an IoT project that uses skateboarding, digital technology, and interaction design to stimulate a novel and unexpected understanding of the surrounding environment. Skaters are artists who interpret space differently than most people, able to see a hidden layer of opportunity embedded in ordinary urban elements. In their eyes, stairs, cement blocks, handrails, and benches become the raw material for their performative acts through which they reinterpret the fruition of space and space itself.

The core element of the Noiseboard project is a set of skateboards that have been modified to include, hidden in their structure, a microcontroller, an accelerometer, and a wireless antenna. These devices translate the movements of the skateboard into digital data that are transmitted to a computer and used by a sound designer to generate sound.

Noiseboard's design consists of two main elements: The circuit casing, conceived as a sort of alien parasite that contaminates the board, and the board itself.



More info:
chihauccisoilconte.eu

Noiseboard

Made for Cultura Venezia W. A. Rizzo and G. Dinello