CAN—V5

Archives

Bl0g   NFT$

Øbjects   Jobs

🔍   ··

Submit

Dashboard

Pour Reception – Water as a digital (material) interface

Author Filip Visnjic   **Category** Arduino Members Processing   **People** Simone Okholm Hansen, Tore Knudsen, Victor Permild   07/02/2018   Tweet   ☆ Save

Created by Tore Knudsen, Simone Okholm Hansen and Victor Permild, *'Pour Reception'* is a playful radio that uses **machine learning** and tangible computing to challenge our cultural understanding of what an interface is and can be. Two glasses of water are turned into a digital material for the user to explore and appropriate.

> **"The design materials that we have available when designing digital artifacts expands along with the technological development, and with the computational machinery it is possible to augment our physical world in ways that challenges our perceptions of the objects we interact with. In this project, we aim to change the users perception of what a glass is – both cultural and technical."**

The *Pour Reception* radio has internal speakers, an AUX input, a small guide, and an interface of two glasses resting on a smooth surface. When adding water to one or both glasses, the radio turns on and invites the user to explore the interface that controls the familiar functionalities of a radio. A playful attitude and a puzzle inspired approach is almost required to create a new mental model for how the glasses functions as an interface. Instead of operating with dials and buttons, as one would do with a traditional radio, Pour Reception is operated by interacting with the glasses. Changing channel is achieved by pouring water from one glass to the other. Fine-tuning the channel, to filter off distortion and noise, is done by touching and grabbing a glass containing water. Finally, touching the water in the glass lets the user affects the volume of the radio.

The team have used the **Tact library** by **NANDStudio** alongside **Arduino** to create a capacitive sensor which is capable of making readings with rich details. Using these data readings together with **Wekinator**, it was possible to classify various gestures when interacting with the glasses, and furthermore, map those gestures into commands for controlling the radio. In addition, the sensor can operate through non-conductive materials (such as glass, wood, and acrylic) to create a "chain of sensors", which allows them to hide the first link in the chain (aluminium plates) under the second layer (acrylic) and create an experience of soly interacting with the last chain (the glasses of water). **Processing** was used to do the communication between Arduino and Wekinator.

Project Page │ **Tore Knudsen**

Pour Reception - A playful radio
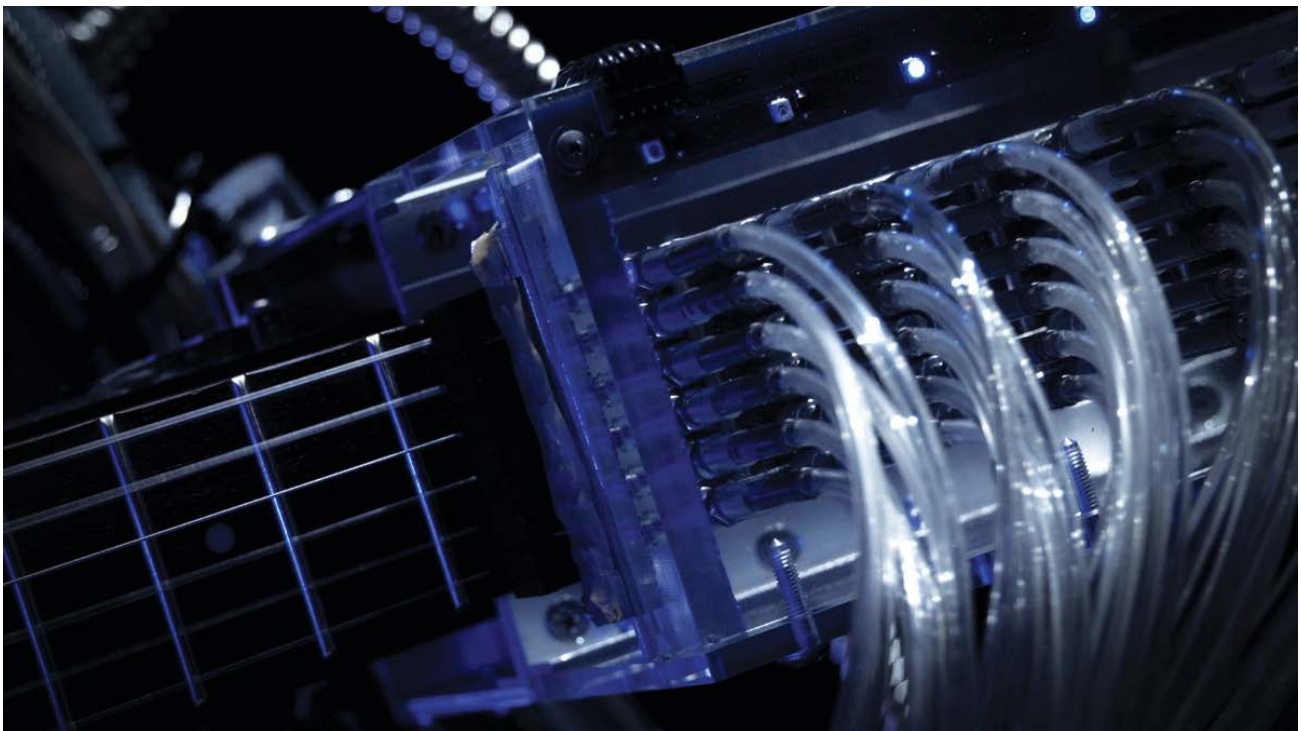
Tore Knudsen

03:27

/++

Electric Deluxe Merchandise – Screen-printing images delivered by sound
Studio Hands use Processing and openFrameworks to send send designs of T-shirts and the bag via sound to be screen-printed.


Squarepusher x Z-Machines – The making of stupendous music machines

Some seven months ago Squarepusher and WARP records released a video titled Z-Machines, comprised of hand built robots showcasing the stupendous chops of the robot guitarist, drummer and keyboard player.
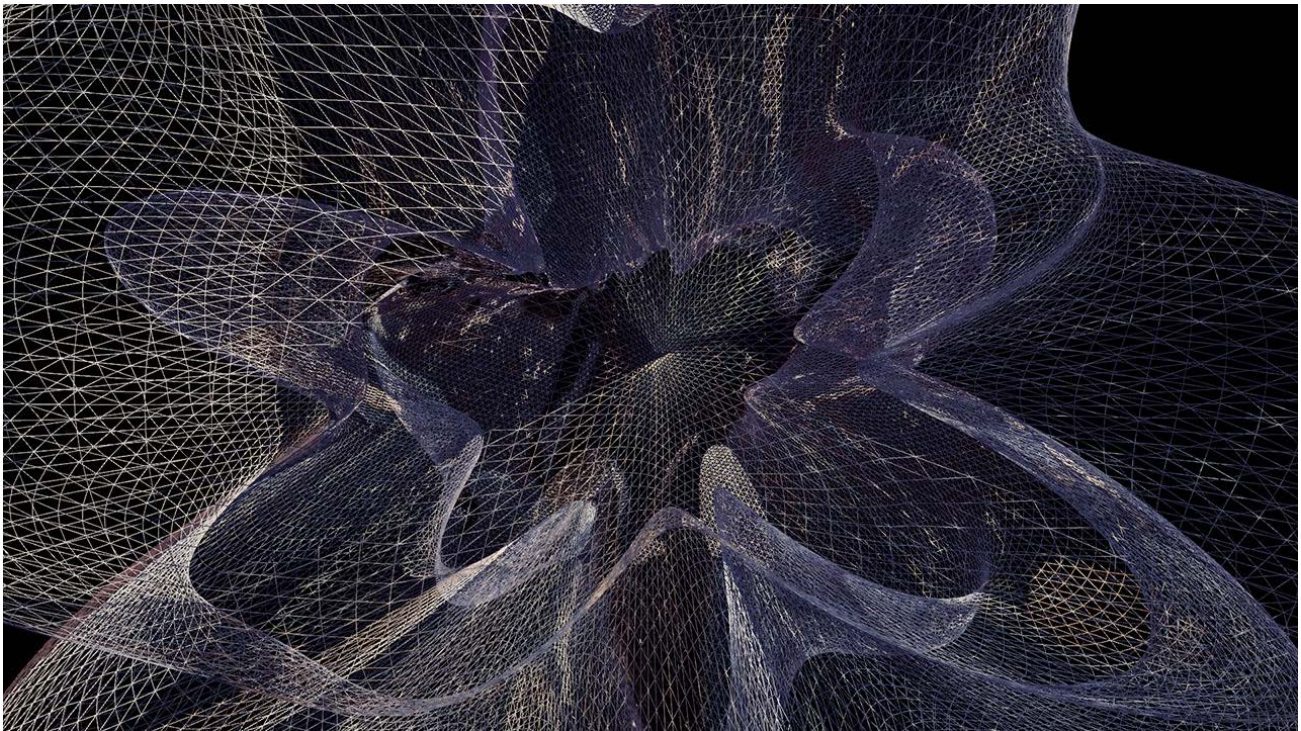
Geometry, Textures & Shaders with Processing – Tutorial

From custom geometry to adding textures to 2D and 3D shapes, Amnon Owed shows you practical examples of a number of crucial building blocks for 2D/3D Processing projects.
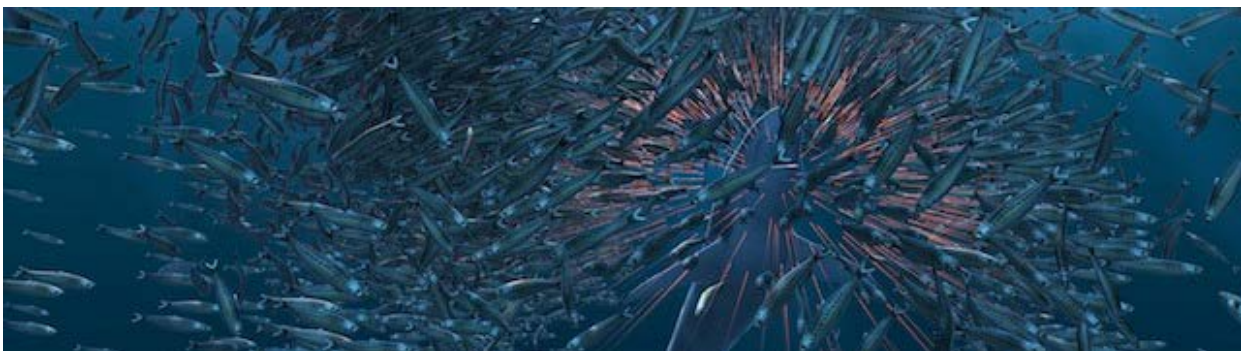
Moana, My Ocean – Real-time feeding frenzy simulation by Robert Hodgin

Real-time simulation of an underwater feeding frenzy by Robert Hodgin comprised of 7000 fish, dolphins and sharks created for Auckland War Memorial Museum.

Posted in Arduino Members Processing - Tagged arduino capacitive Interface machine learning Processing radio sensor Simone Okholm Hansen Tore Knudsen Victor Permild water Wekinator- People Simone Okholm Hansen, Tore Knudsen, Victor Permild

Leave a Reply

*Logged in as fjenett. Edit your profile. Log out? Required fields are marked ** *

Comment *

Post Comment

Discord
Twitter
Instagram

CreativeApplications.Net [CAN] is a community of creative practitioners working at the intersection of art, media and technology. Since 2008, CAN has been at the forefront of innovation—facilitating and contributing to the conversation about culture, society and critical making. CAN is also known for uncovering and contextualising noteworthy work featured on the festival and gallery circuit, executed within the commercial realm or developed as academic research. From online and offline publications to live events, CAN's initiatives have played an instrumental role in the ideation, development and critique of a multitude of computational tools, projects and collaborations — always promoting critical dialogue, disciplinary interstices, knowledge sharing and feedback + response in diverse media. Join us today by becoming a Member.

Youtube
Facebook
GitHub
RSS Feed