

CUSTOM COMPONENTS & VJING.

Today

- Small introduction round
 - Who are you ?
 - What major are you doing?
 - What is your experience with touchdesigner or software in general?
- short introduction to Touchdesigner
- Instruction Interface & creating operators
- break
- workshop creating adapting

Vincent Boon

Assistant Instructor at Interaction Station
Digital artist & Creative Developer
VR / Realtime / Immersive / Animation
Started with Touchdesigner 3-4 years ago
Graduated from WDKA 2022

[LTV](#)



Please help me out!

Let me know when things are unclear or going too fast. And if you have feedback afterwards I am happy to learn from you!

What is Touchdesigner

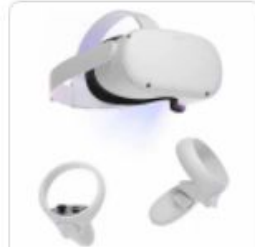
- Node based programming software
- Procedural / Generative
- Data processing
- Interactive

Why is it amazing

- Its so fast to prototype
- Great for LIVE performances, shows & interactive installations
- Great for audiovisual experiences
- Great for Projection mapping
- Great for abstract and immersive
- [Great for connecting different software & hardware](#)
- Great for generative design
- Free non-commercial license



Cameras / Movement sensors



Ableton / Midi / OSC

Oculus Rift / Vive



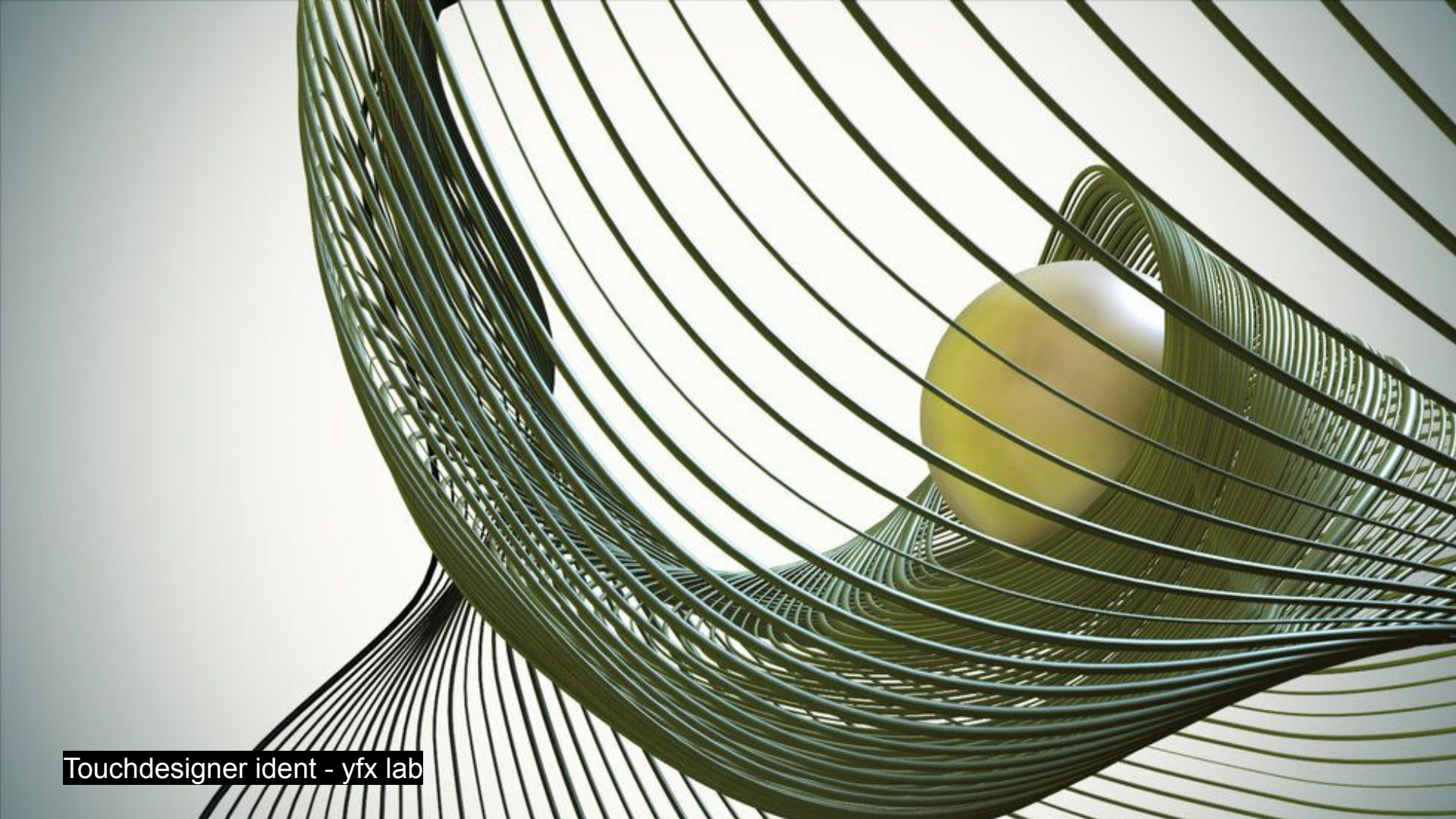
Lights / Lasers / Beamers / screens





Amaze amsterdam - Darien Brito / Nikzad / Yfx-Lab





Touchdesigner ident - yfx lab

Important touchdesigner creators

<https://www.yfxlab.com/projects>

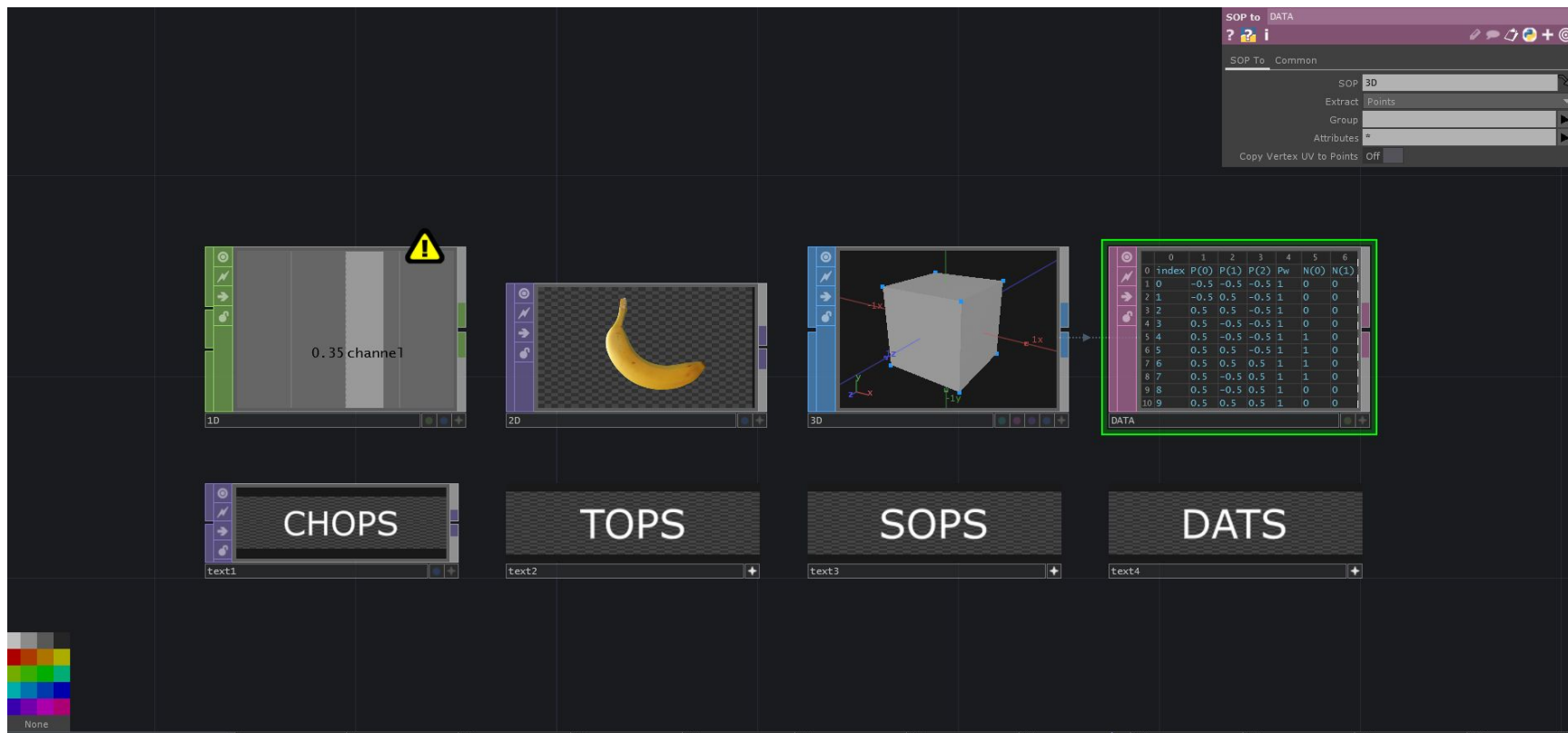
<https://www.youtube.com/watch?v=ELFmN4w86Yc>

<https://darienbrito.com/>

<https://kohui.xyz/>

<https://www.elekktronaut.com/projects>

Operators



INPUT -> OPERATIONS -> OUTPUT

- MUSIC/ SOUND -> AUDIO ANALYSIS -> ANIMATIONS -> TEXTURE (image or video) -> PROJECTION
- WEATHER DATA -> DATA VISUALISATION -> LIGHT INSTALLATION



Network (patch)

input

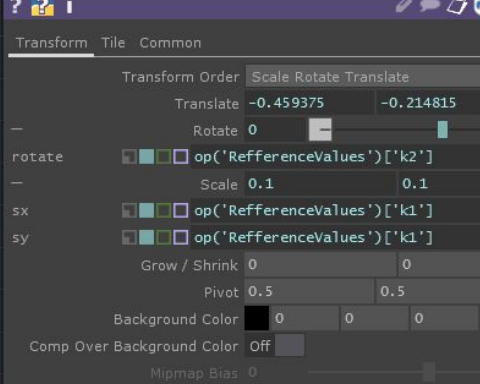
input

output

exporting / referencing

input

output



**Looks cool and complicated,
how do you control it.**

COMPONENTS

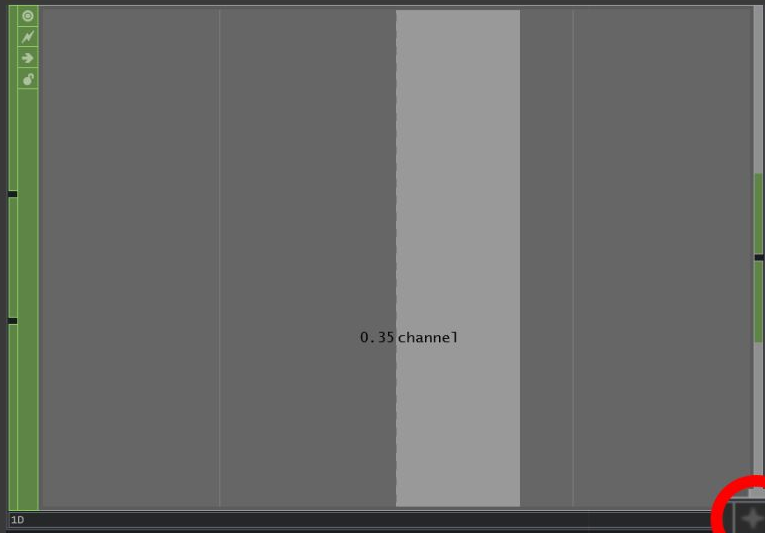
- A small application to do certain tasks that are repetitive or make your life easier
- Interactive windows, User interface elements,
- plugin or extensions for all kinds of action/ interactions
- Interactive effects and controls

Today in this Workshop

- Parameters
- COMPS
- Component editor
- Custom parameters
- Adapting a feedback network

Tutorials and resources

- [beginners course](#)
- [interactive and immersive hq](#)
- <https://alltd.org/>
- <https://www.youtube.com/c/NotoTheTalkingBall>
- [free touchdesigner projects](#)

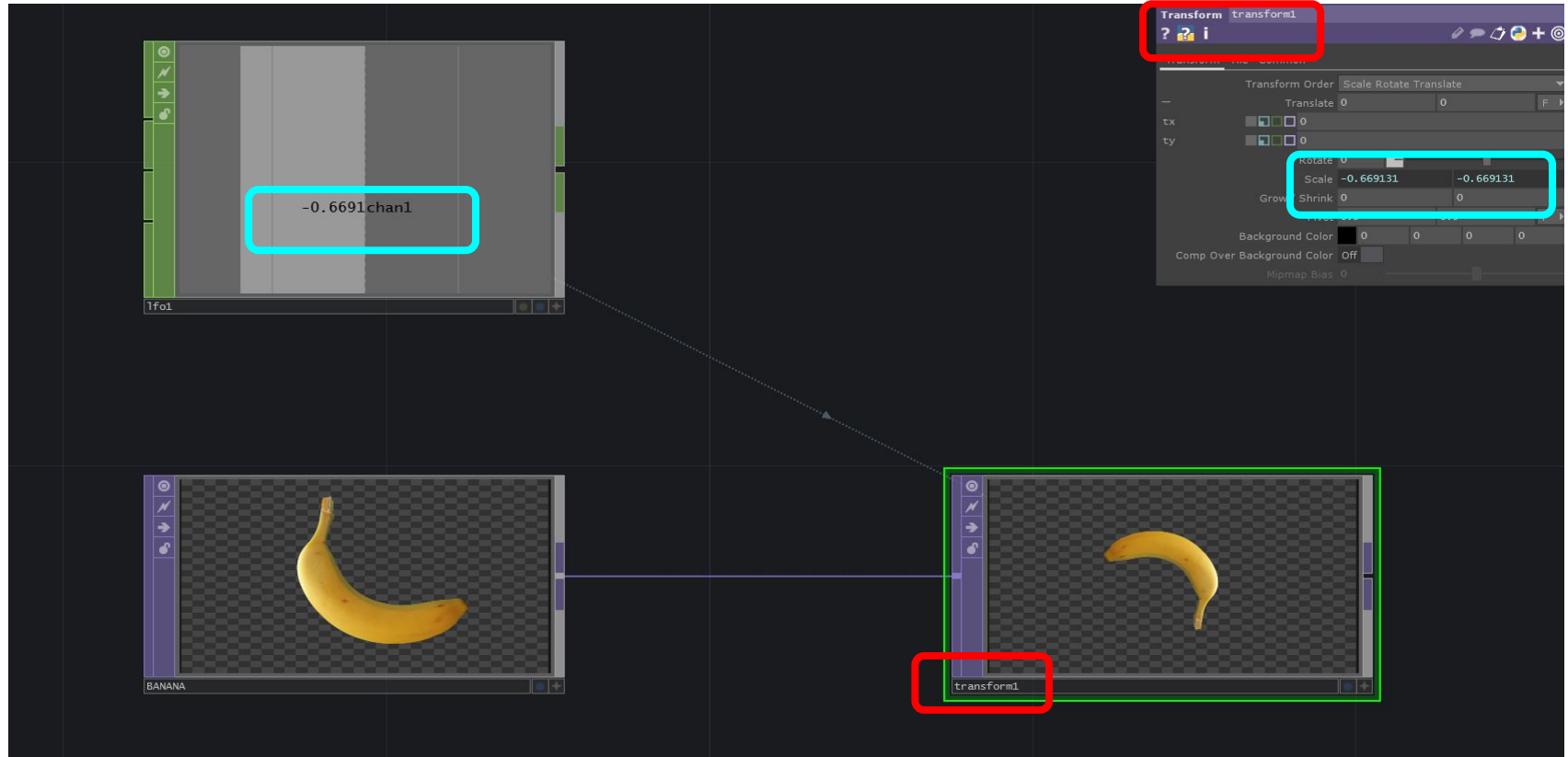


Click to make viewer active



Click and drag channel to the parameter you want to control

Making a reference



ADDITIONAL ASSIGNMENT

ADDITIONAL

- Threshold + Multiply top after the in1 > taking threshold an in as input for the multiply
 - Custom parameters (float) for threshold and softness
- add a switch after feedback and transform1 and connect both ops
 - Custom parameter “Transform effect” (toggle) to control the index of the switch

Experiment with operators in feedback network

- blur
- tile
- edge