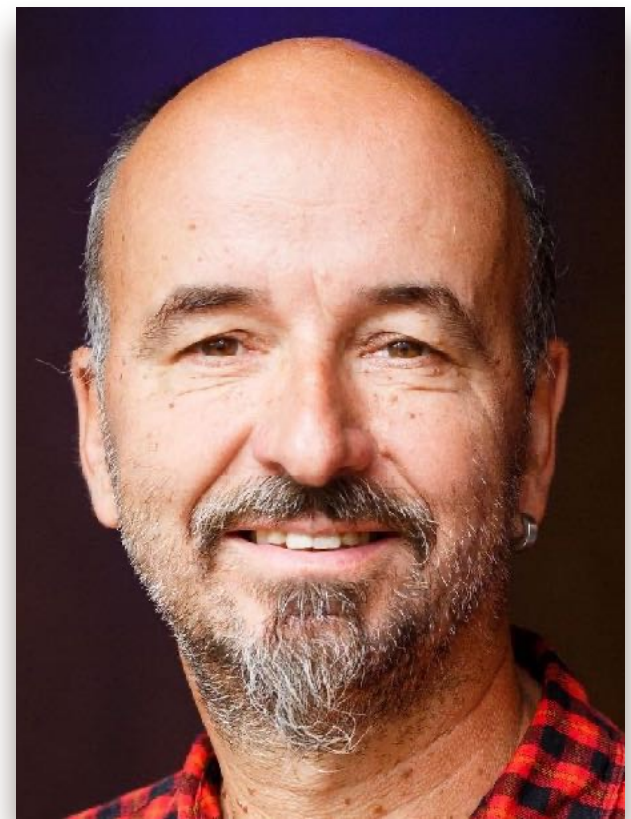# The Power of Simplicity
Crafting Durable Software Systems

Bertrand Delacrétaz

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Former Board Member, Apache Software Foundation

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grep.codeconsult.ch

images: Adobe Stock & Firefly, unless otherwise mentioned
revision 2025-03-12

DEVOPSDAYS ZURICH

Adobe

3 chapters

Beautiful Simplicity

Examples

But how?

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1
Beautiful Simplicity

Beautiful & Obvious Simplicity

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Nothing
to remove?

DEVOPSDAYS
ZURICH

Kazoo
Minimalist
Effective

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Simple, but
not simplistic..

2024

2024

1930

afkazoo.ch

kazoo 2024: Bertrand Delacrétaz
DEVOPSDAYS ZURICH

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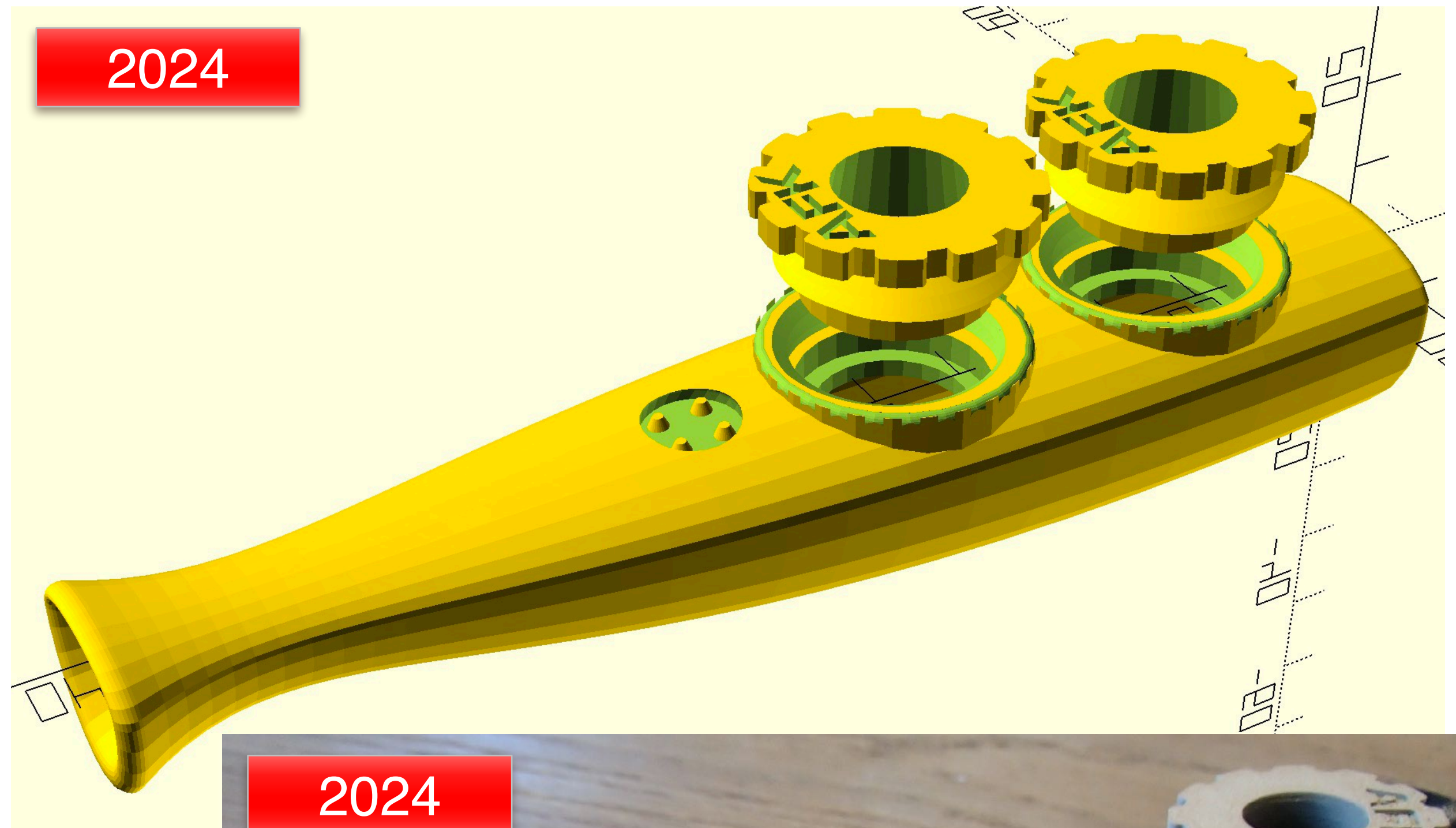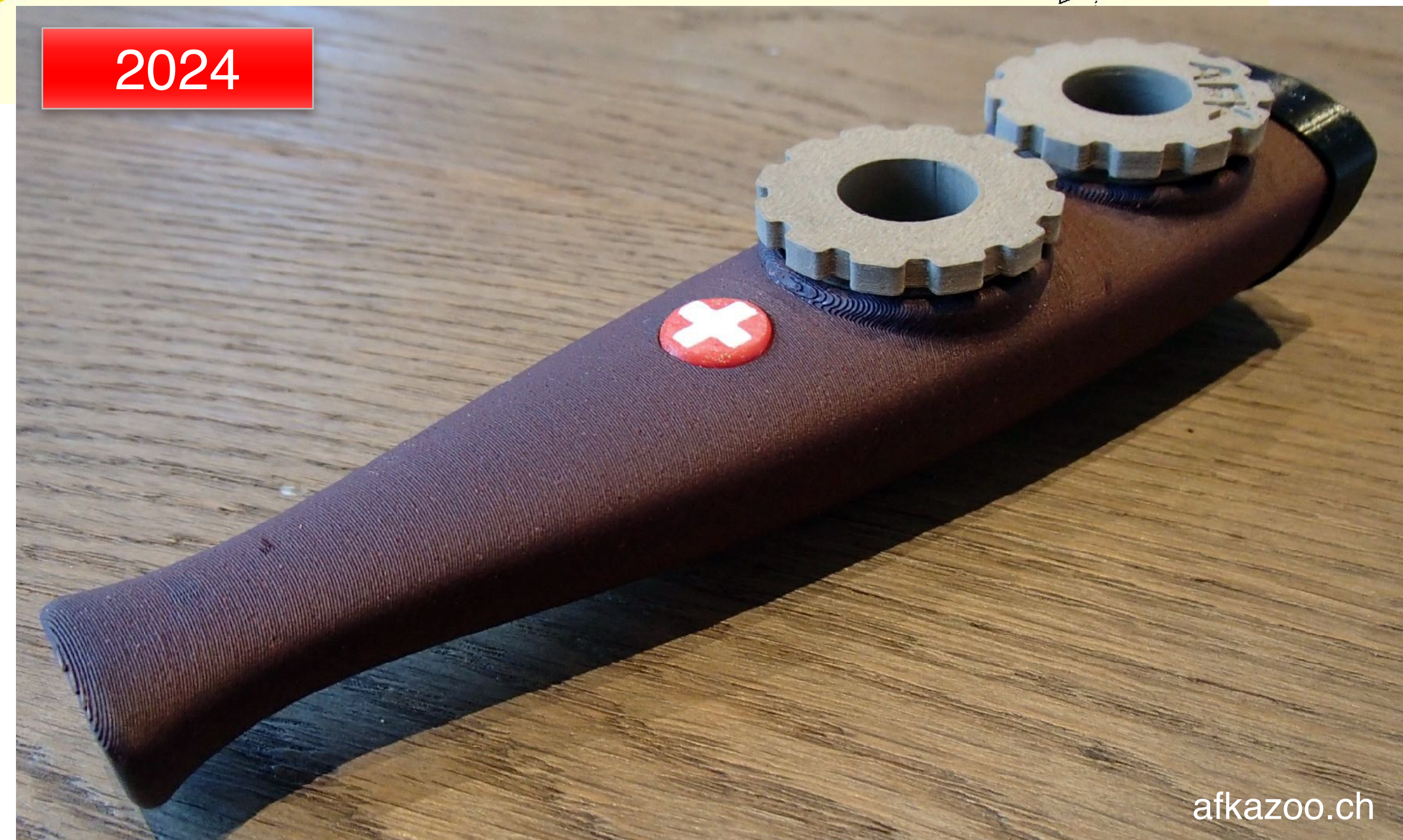
Simple, but not simplistic!

SPACE & PHYSICS

Fact or Fiction?: NASA Spent Millions to Develop a Pen that Would Write in Space, whereas the Soviet Cosmonauts Used a Pencil
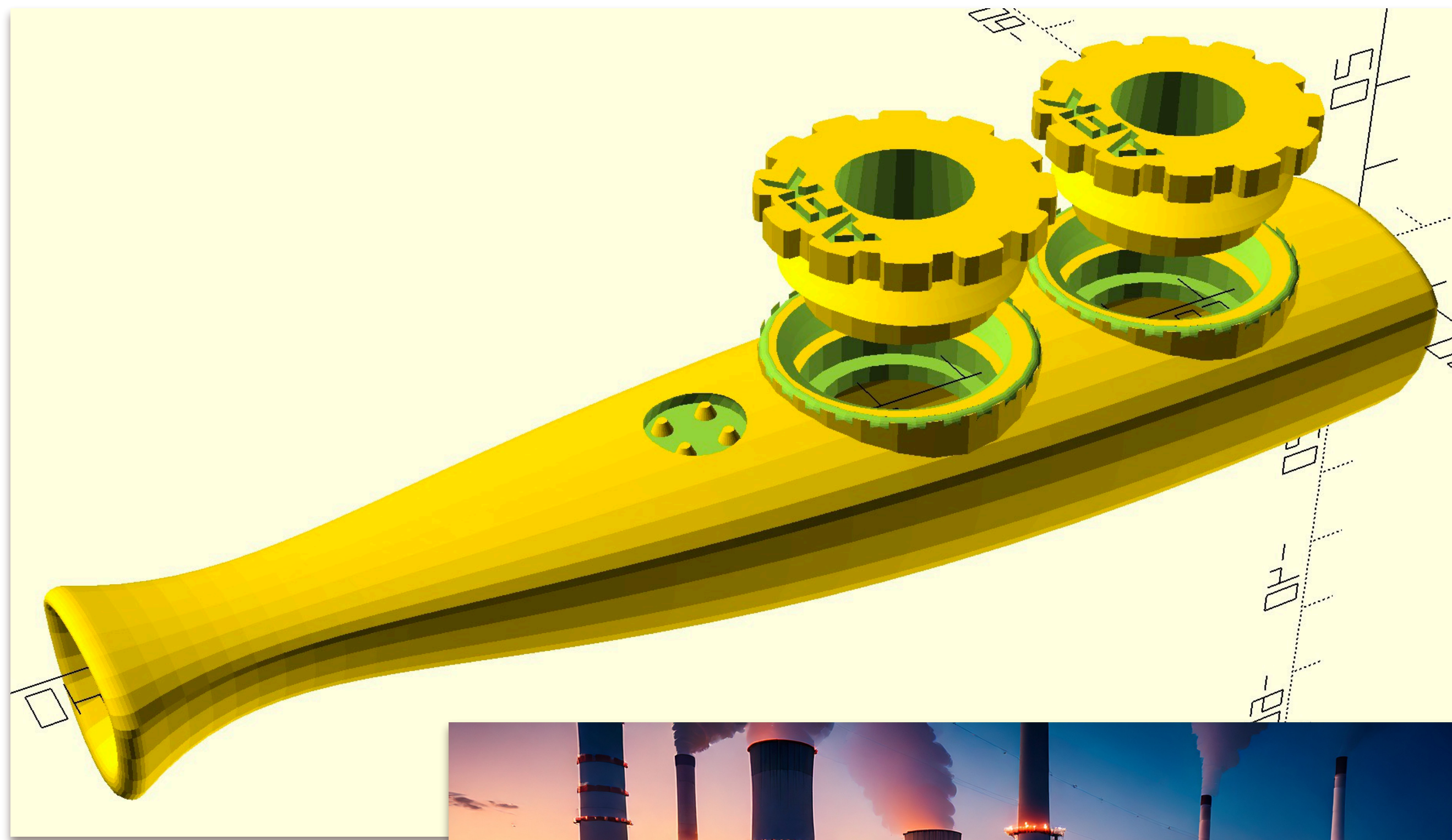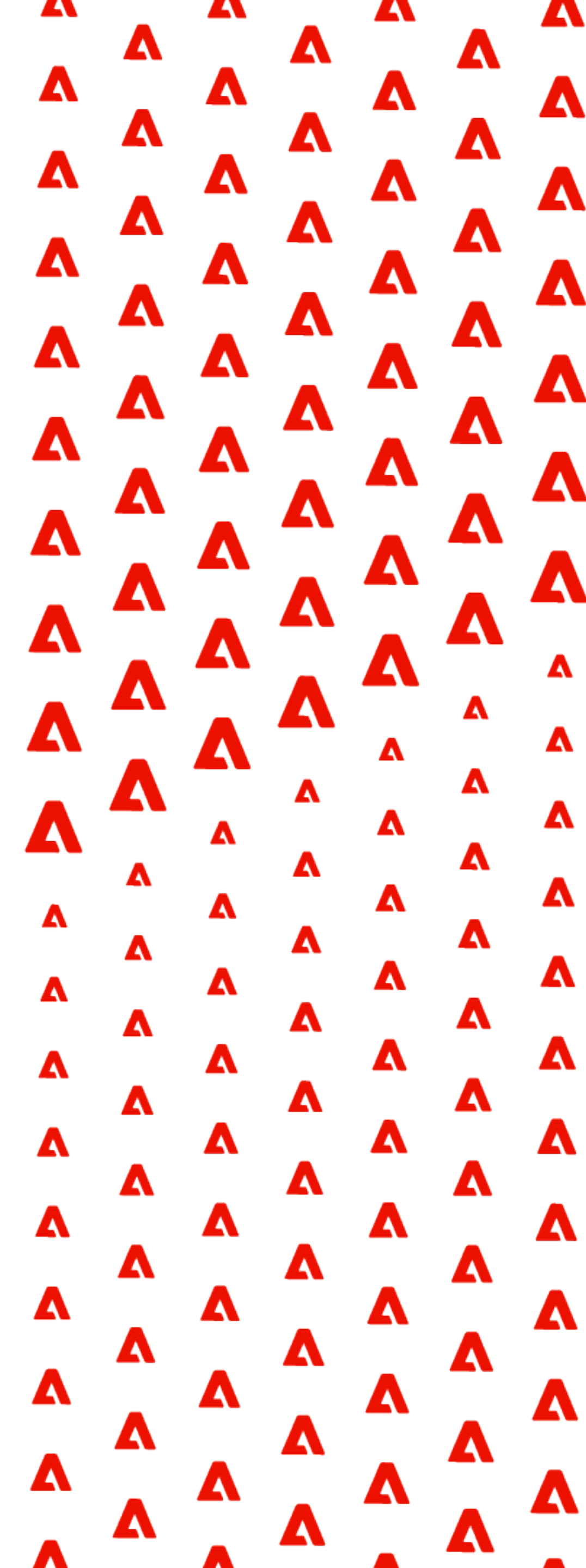
SCIENTIFIC AMERICAN

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How much power do you need?

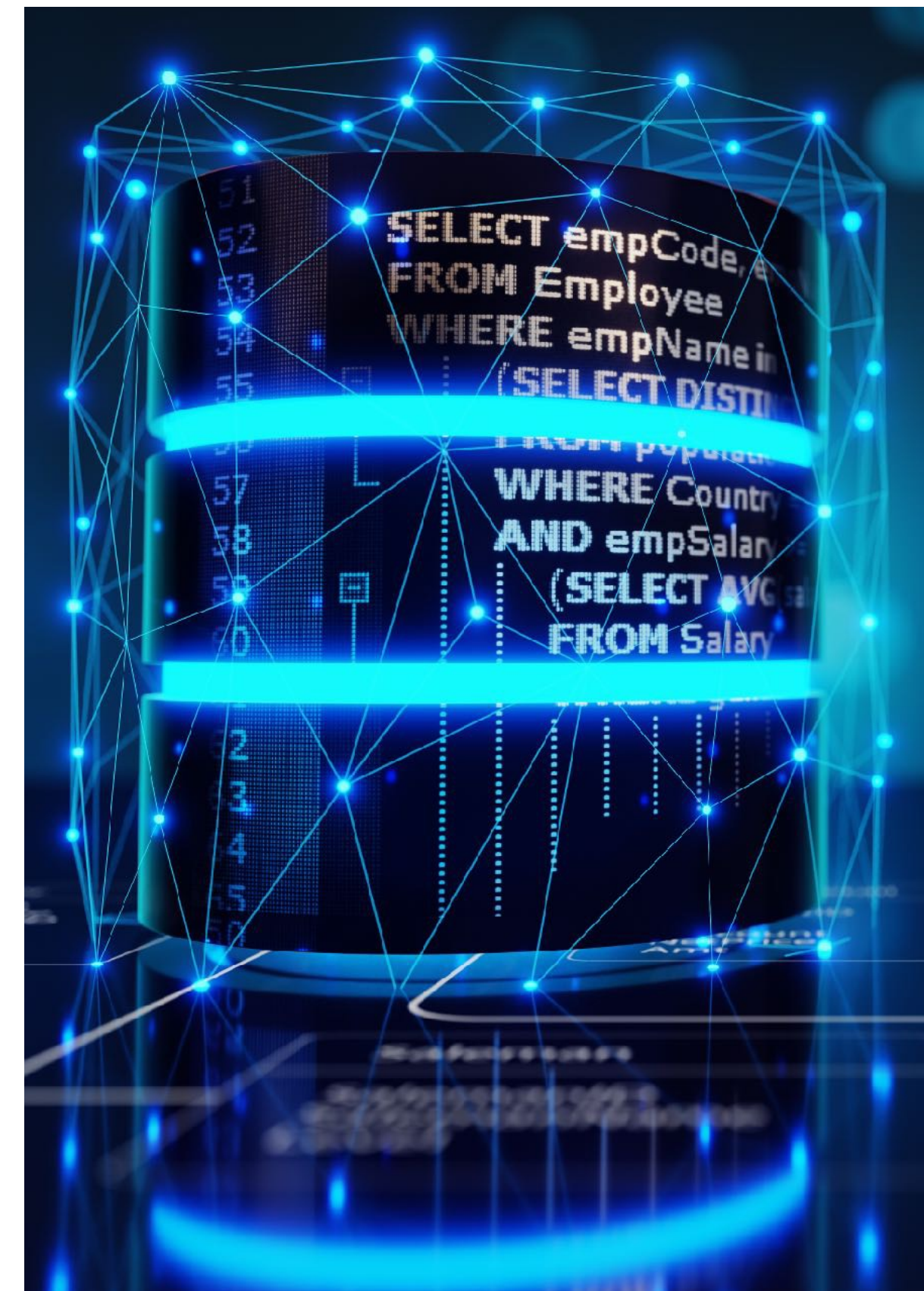Splendid, efficient & appropriate simplicity

2
Examples

Continuous weather data acquisition?

A few hundred stations

continuous data
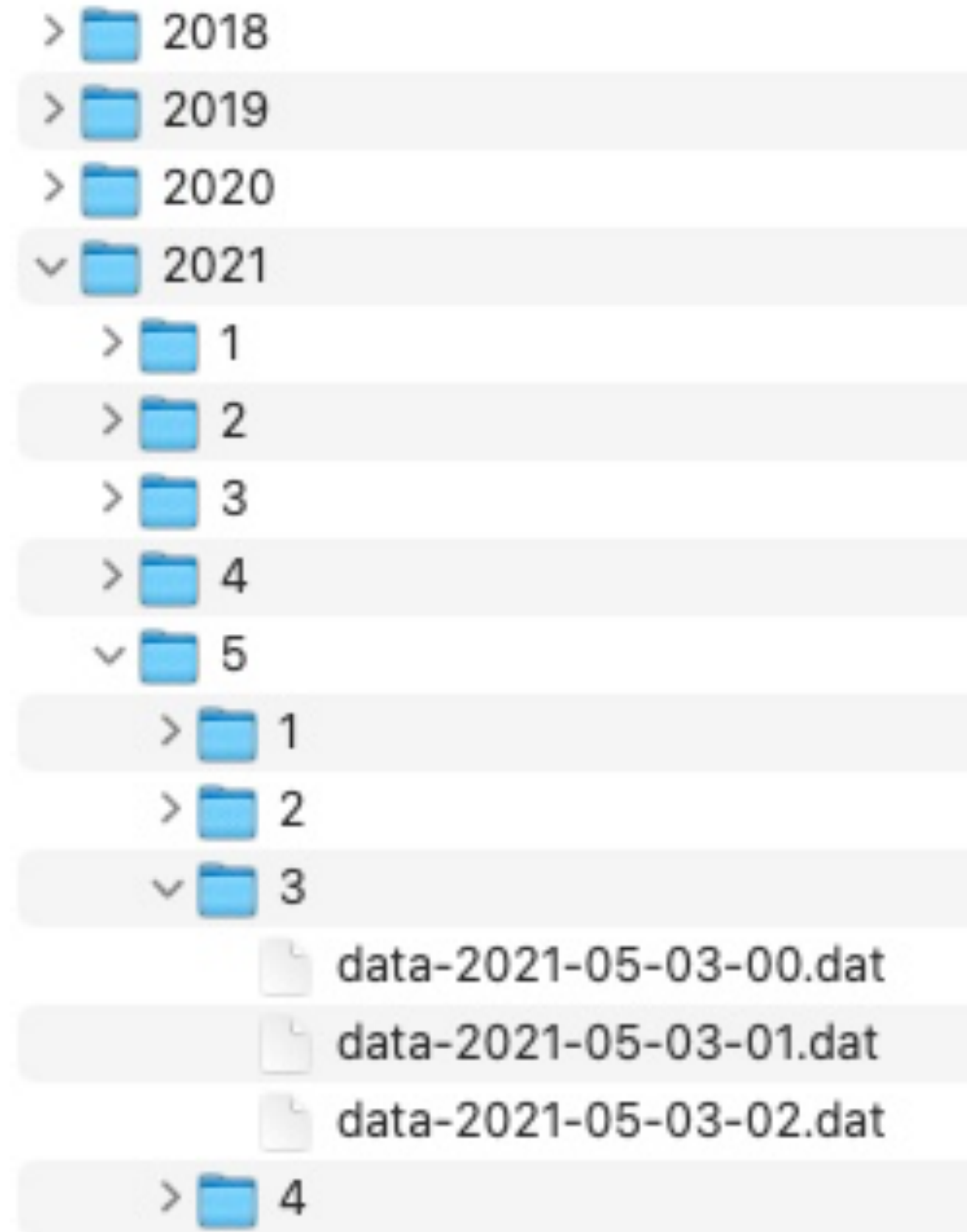

Simple storage & queries?

Continuous weather data acquisition!

continuous data →

A few hundred stations

Simple storage and queries:
Chronological folders & files

Robust digital audio recording?

Back in 1999..

continuous audio recording
less than 15 seconds lost, whatever happens

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Robust digital audio recording??

Back in 1999..

complicated?
really?

Robust digital audio recording!

variable speed replay

RTP packet recorder

Robust Storage

continuous data

```
s = UDP socket
While(s is open) {
    Wait for packet
    Packet matches our filter?
    If yes:
     Compute storage path from T
     Append packet to storage file
}
```
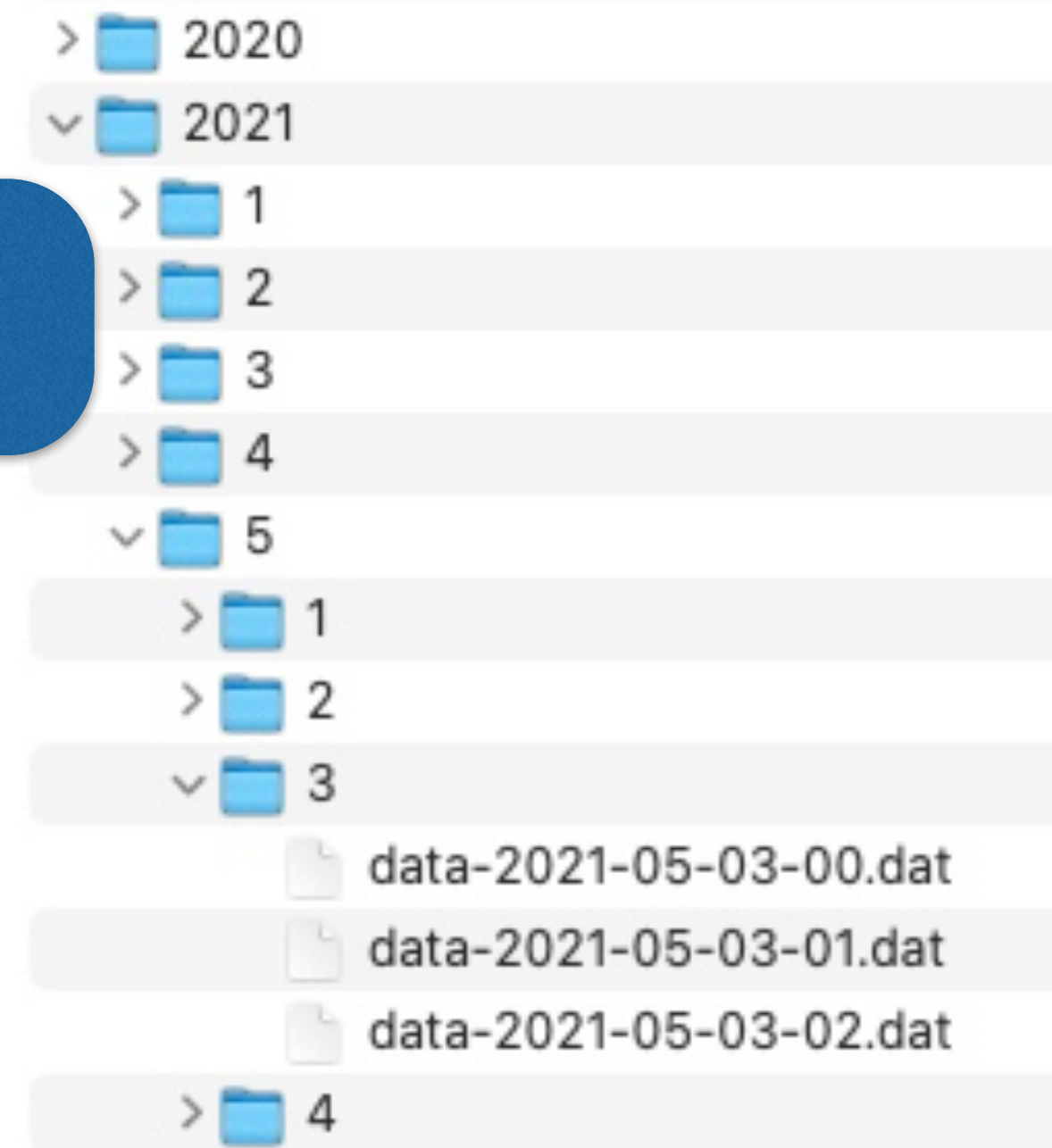
> 2020
> 2021
  > 1
  > 2
  > 3
  > 4
  > 5
    > 1
    > 2
    > 3
        data-2021-05-03-00.dat
        data-2021-05-03-01.dat
        data-2021-05-03-02.dat
    > 4

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Web Components for a commerce page?

https://opensource.adobe.com/web-platform-zoo

Web Components for a commerce page?

https://opensource.adobe.com/web-platform-zoo

8 components?

STATUS — Cart: **7** products, **38** items, USD **540** - Cart contents

IMAGE

PRODUCT

TITLE

SLIDER

PRICE

TEXT

Blue bottle
+ 3 -
USD 17 : **3** in cart → USD **51**
This one is really blue

Symmetric knife
+ 11 -
USD 21 : **11** in cart → USD **231**
Not really, it's just marketing

Fantastic bottle
+ 4 -
USD 19 : **4** in cart → USD **76**
This bottle is really fantastic

Super bread knife
+ 0 -
USD 8 : **0** in cart → USD **0**
Stainless steel, the works!

East white
+ 11 -
USD 5 : **11** in cart → USD **55**
Eastern is bestern

Soft South Red
+ 5 -
USD 15 : **5** in cart → USD **75**
Soft but not weak!

Kitchen knife
+ 2 -
USD 10 : **2** in cart → USD **20**
A must for every kitchen

White from the South
+ 0 -
USD 6 : **0** in cart → USD **0**

PRODUCT LIST

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Web Components for a commerce page!

https://opensource.adobe.com/web-platform-zoo

simple but not simplistic!

A11Y STATUS
(INVISIBLE)

STATUS   Cart: **7** products, **38** items, USD **540** - Cart contents

4 + 1 components !

Blue bottle

INC-DEC   [+] 3 [-]

USD 17 : **3** in cart → USD **51**

HTML TEMPLATE   *This one is really blue*

Symmetric knife

[+] 11 [-]

USD 21 : **11** in cart → USD **231**

Not really, it's just marketing

Fantastic bottle

[+] 4 [-]

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[+] 0 [-]

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PRODUCT LIST

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HTTP 0.9, the Original Engine of the Web

GET /index.html

TCP socket

HTML

Client

Server

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3

But how?

Simplicity
front & center

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ZURICH

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The *quest* of simplicity..

Do not give up. Try again.

Measure & Evaluate

It seems that perfection is achieved not when there is nothing more to add, but when there is nothing more to take away.
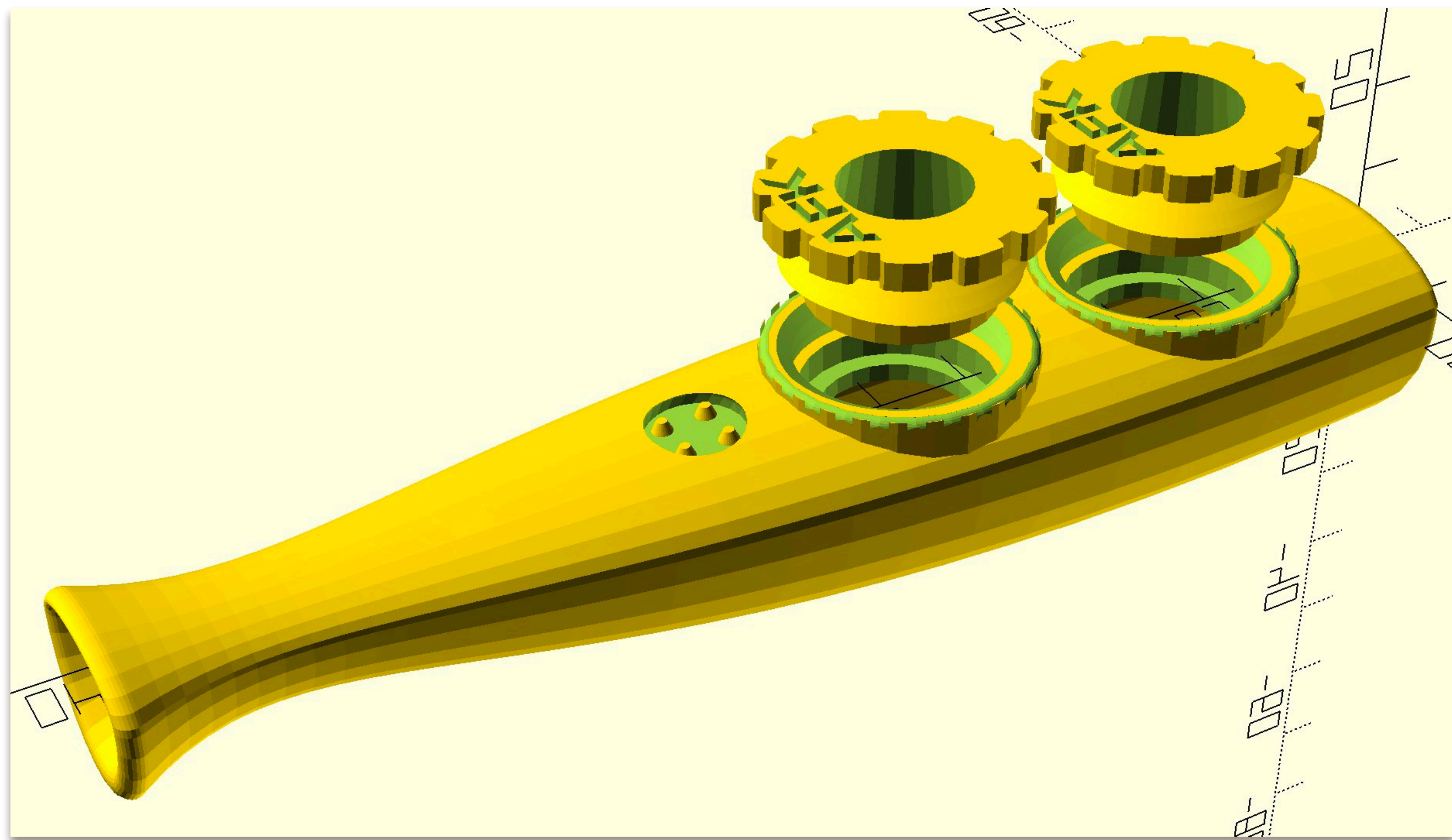
Antoine de Saint-Exupéry

DEVOPSDAYS ZURICH

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Definition of Done

Is there anything left to remove?
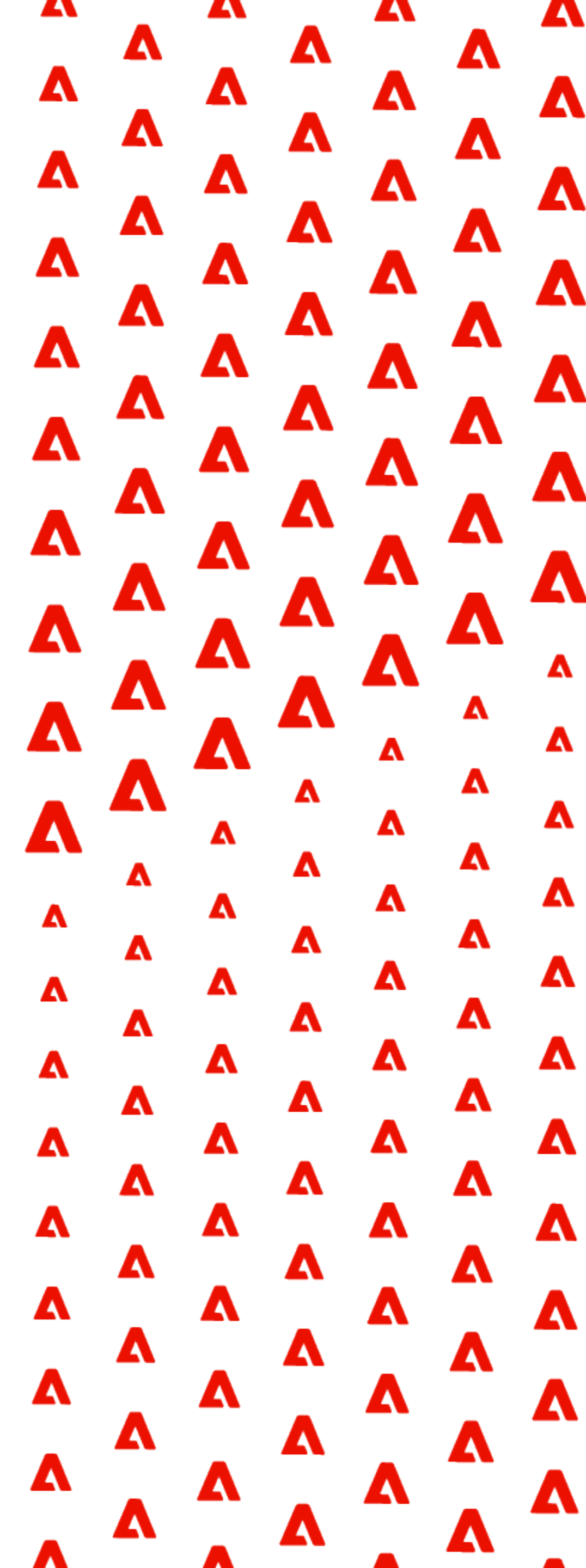
DEVOPSDAYS
ZURICH
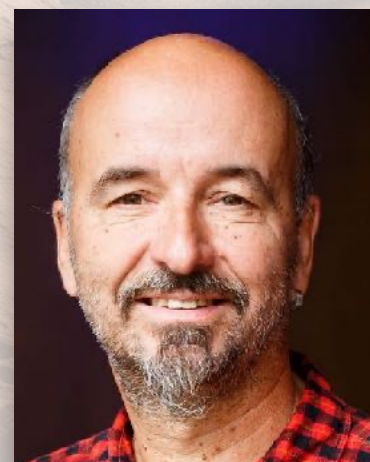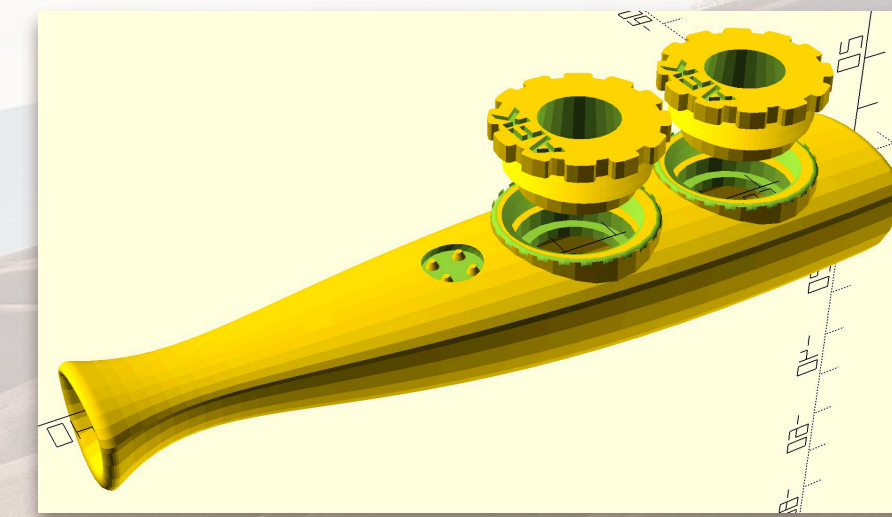
Adobe

Beautiful & Obvious Simplicity

Simple, but not simplistic

4
Coda

Simplicity?
IMPORTANT,
HARD,
INTÉGRABLE!

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grep.codeconsult.ch/

https://grep.codeconsult.ch/2025/03/13/zh/

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