VBoard

Making web dashboards in 3D and VR

FOSDEM'19 Lightning talk
Brussels - 2019-02-02

https://dlumbrer.github.io/VBoard

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CC BY SA

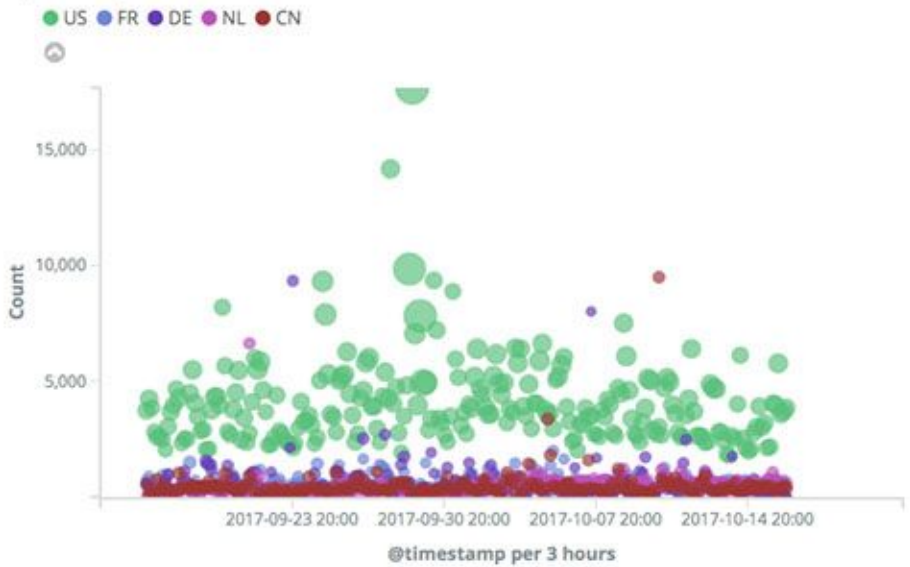
Apache - Total Visitors

2,317,838

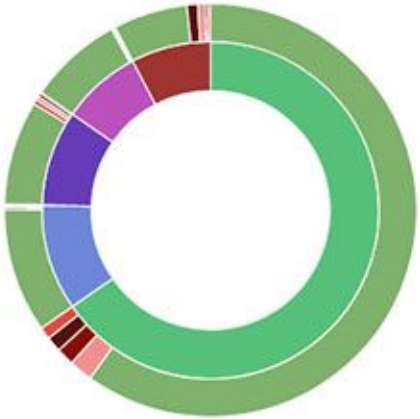
Apache - Unique Visitors

29,740

Apache - Bytes and Count



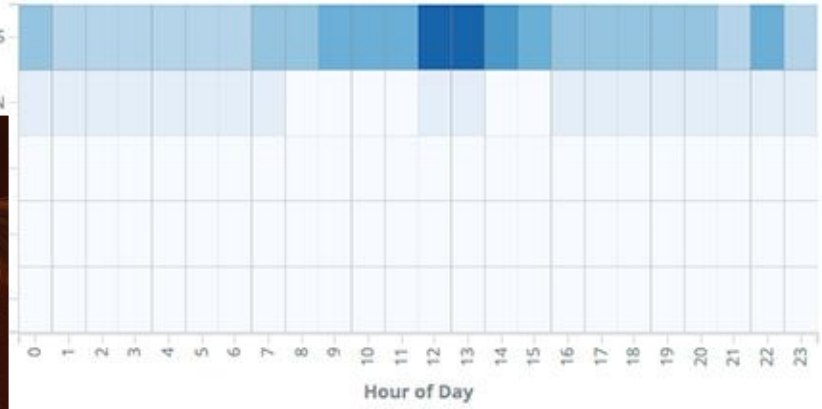
Apache - Country and Status



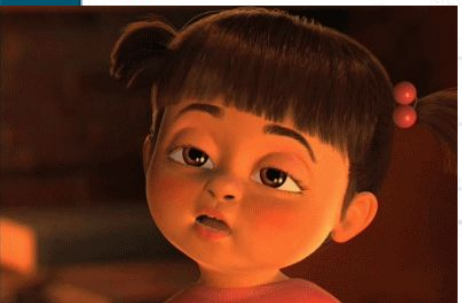
Apache - Unique Visitor...

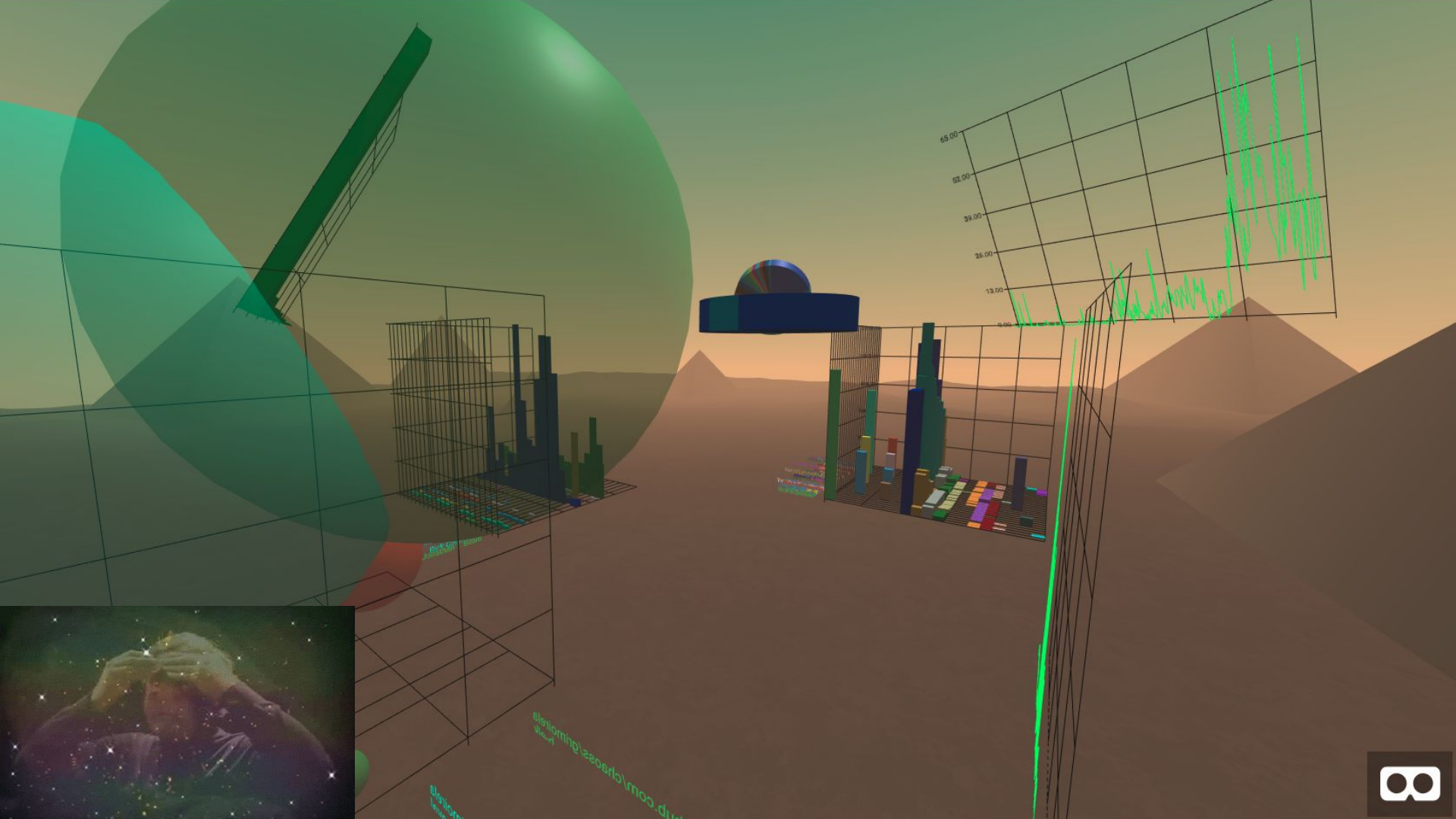
City	Count of Unique Clients

Apache - Country traffic by hour



Apache - Top OS small



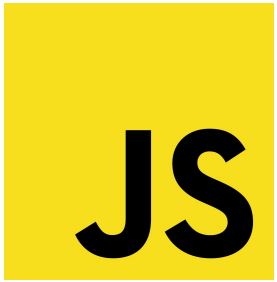

65.00
52.00
39.00
26.00
13.00

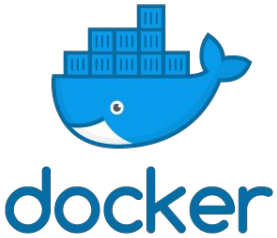
Existing tools **Propietary**

Existing tools → **Propietary**

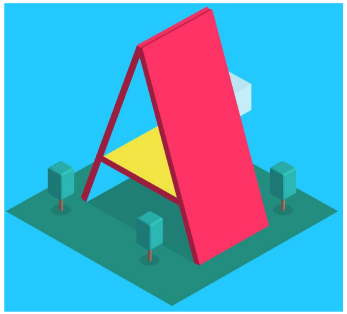
- Known frameworks
- High Level
- Web environment
- Avoid Walled Garden

Complex system of data visualization in 3D and VR

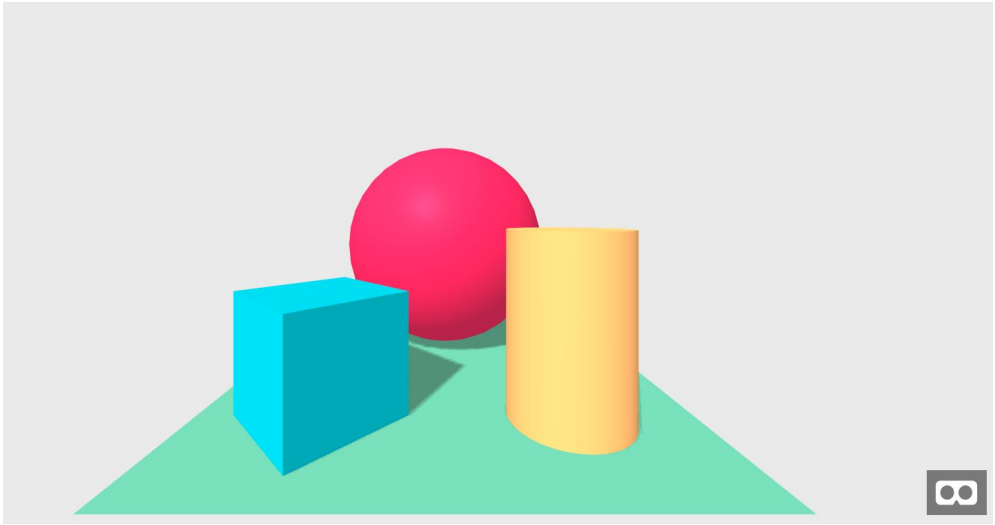




/introduction



```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>Hello, WebVR! • A-Frame</title>
    <meta name="description" content="Hello, WebVR! • A-Frame">
    <script src="https://aframe.io/releases/0.8.2/aframe.min.js"></script>
  </head>
  <body>
    <a-scene background="color: #ECECEC">
      <a-box position="-1 0.5 -3" rotation="0 45 0" color="#4CC3D9" shadow></a-box>
      <a-sphere position="0 1.25 -5" radius="1.25" color="#EF2D5E" shadow></a-sphere>
      <a-cylinder position="1 0.75 -3" radius="0.5" height="1.5"
                  color="#FFC65D" shadow></a-cylinder>
      <a-plane position="0 0 -4" rotation="-90 0 0" width="4" height="4"
               color="#7BC8A4" shadow></a-plane>
    </a-scene>
  </body>
</html>
```



https://aframe.io/

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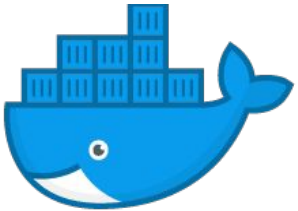
Repository

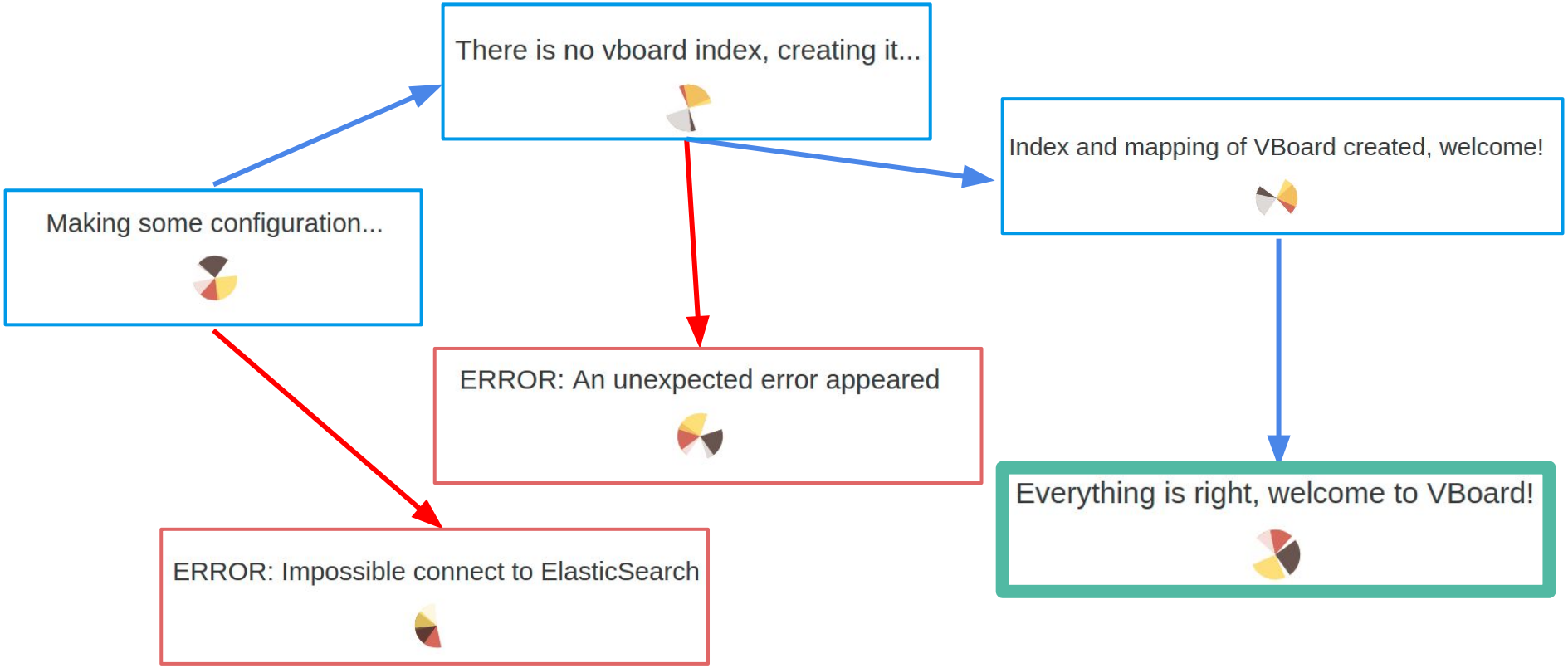
Releases

Docker



Repo: https://github.com/dlumbrer/VBoard

/init


There is no vboard index, creating it...
Making some configuration...
Index and mapping of VBoard created, welcome!
ERROR: An unexpected error appeared
ERROR: Impossible connect to ElasticSearch
Everything is right, welcome to VBoard!

VBoard | Visualize | Dashboard | Show | Switch background

Index: git

Type: items

Show Mapping | Select chart

VisType: Pie

Select Data | Cancel

Metrics:

Principal metric

Type: Count

Buckets:

Principal bucket

Type: Terms **Field:** Author_name

Size: 5

Play | Cancel

Show response (JSON)

Save visualization

Load visualization

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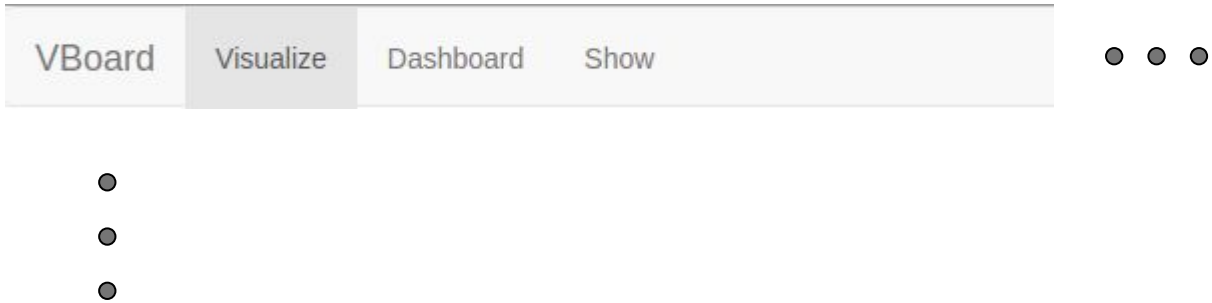
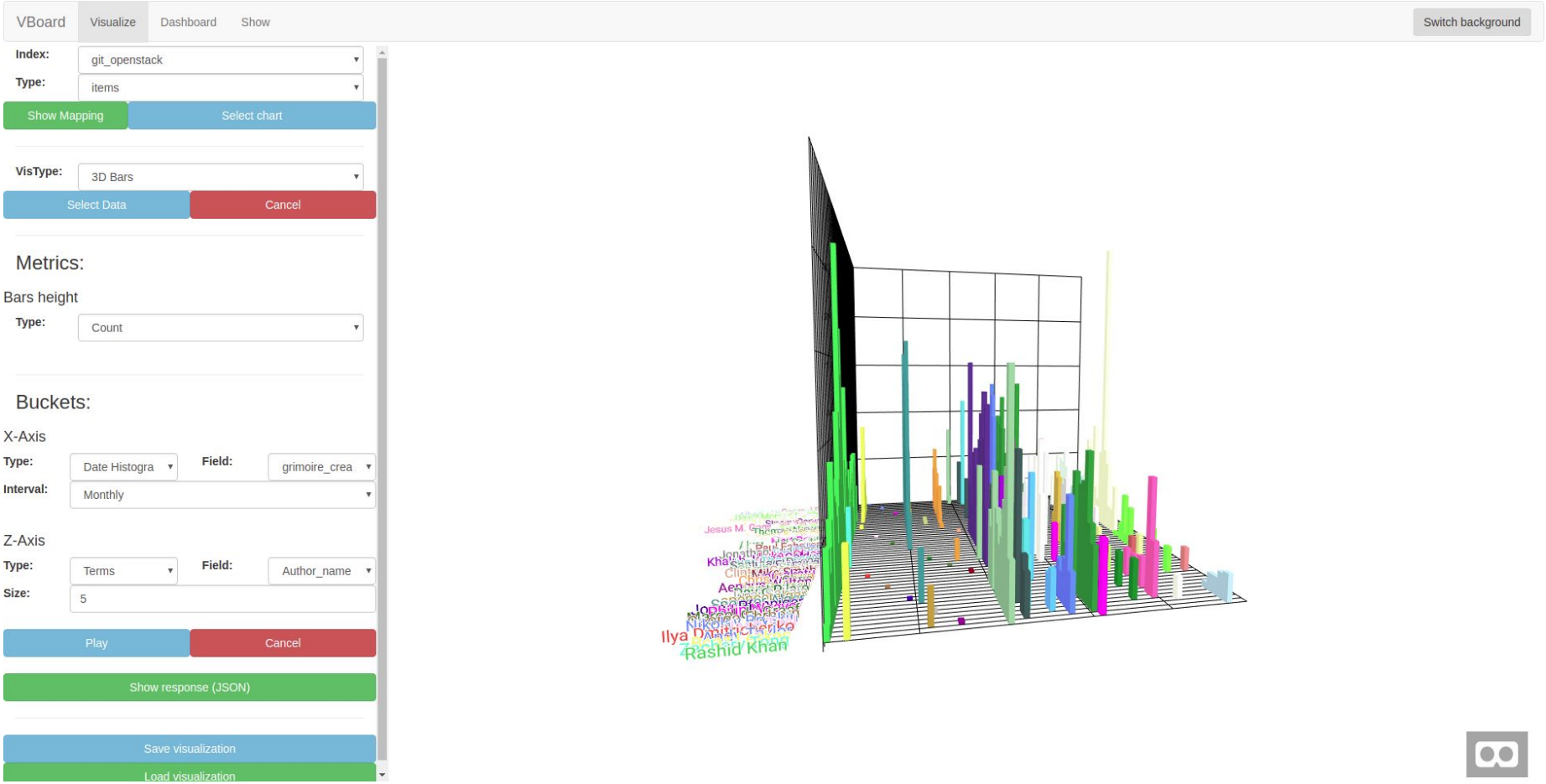

VBoard
Visualize
Dashboard
Show



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https://youtu.be/g7nqrcVOPH0

VBoard Visualize Dashboard Show Switch background

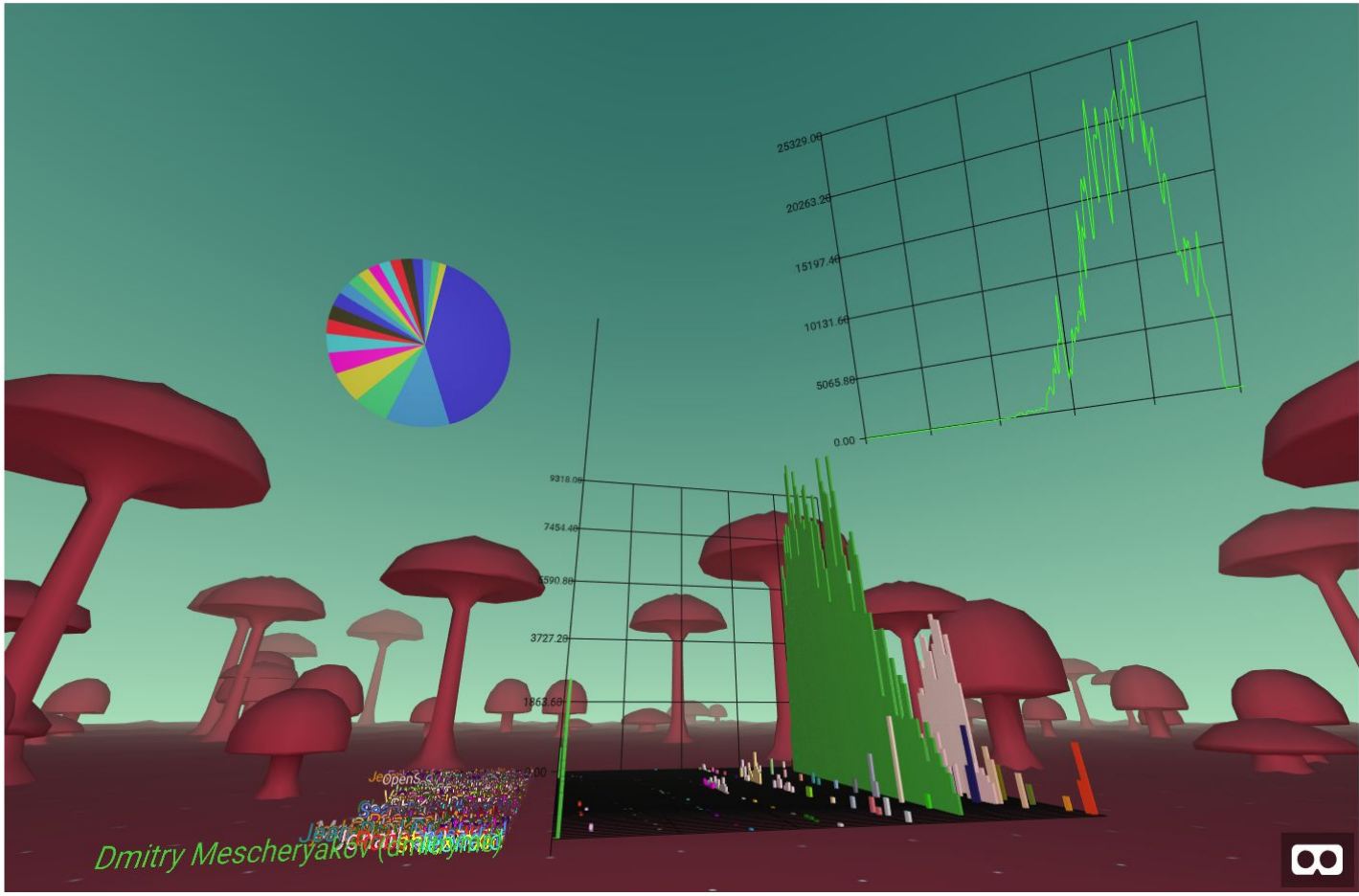
Click to add vis:

- Time evolution of git commits per author — 3DBars — Openstack
- bubbles with height number of commits, radius sum of files in time evolution of repositories — bubbles — Openstack
- Orgs git — pie — GrimoireLab
- PR submitters vs time — 3DBars — GrimoireLab
- Evolution time of gerrit — bars — Openstack
- Time evolution of number of commits — curve — Openstack
- Time evolution of gerrit changeset by status — 3DBars — Openstack
- Count, avg files, authors repo — bubbles — GrimoireLab
- Top 20 organizations by commits — pie — Openstack
- Top 20 projects Git — pie — Openstack

Options:

Save Dashboard

Load Dashboard



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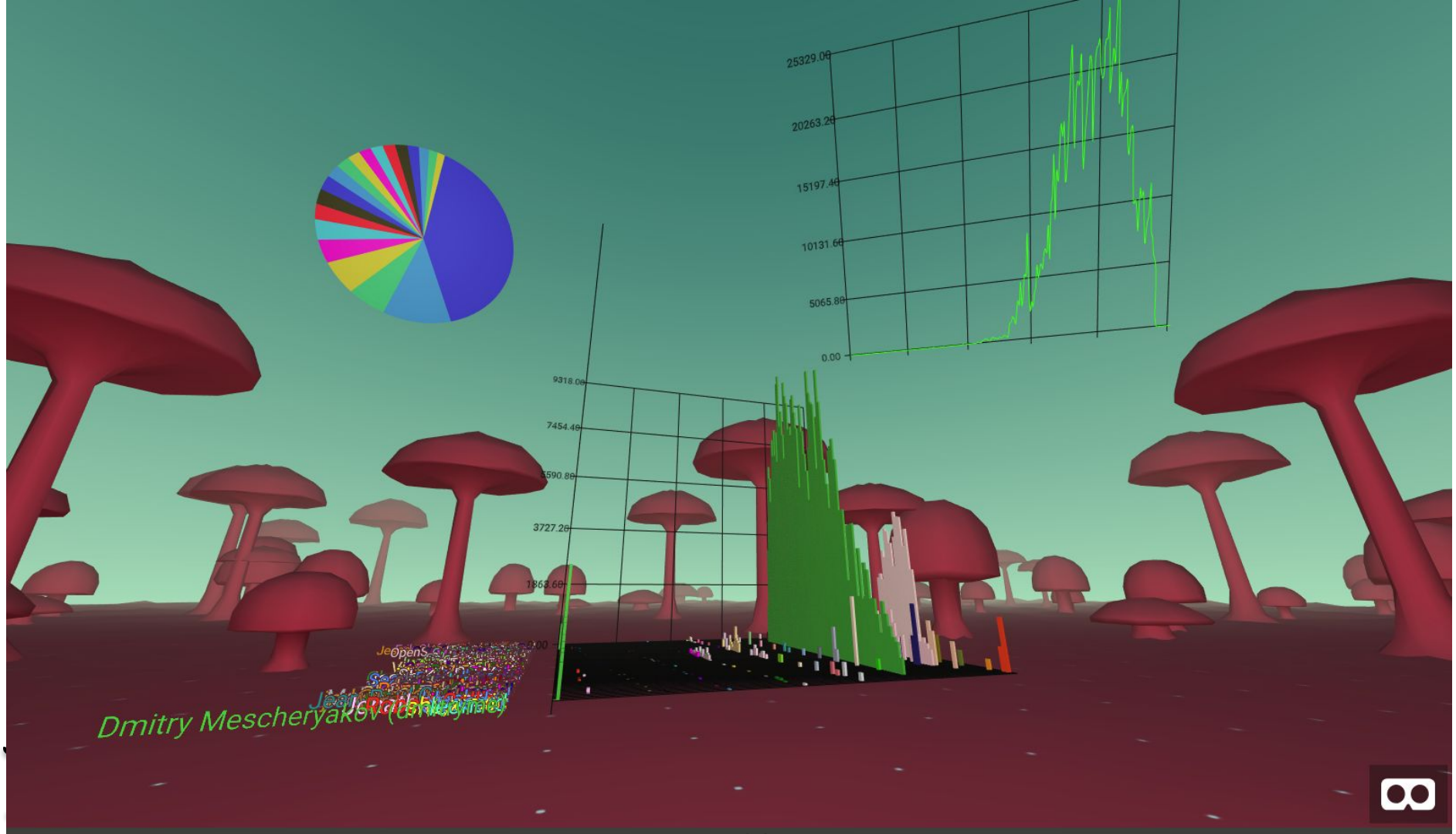
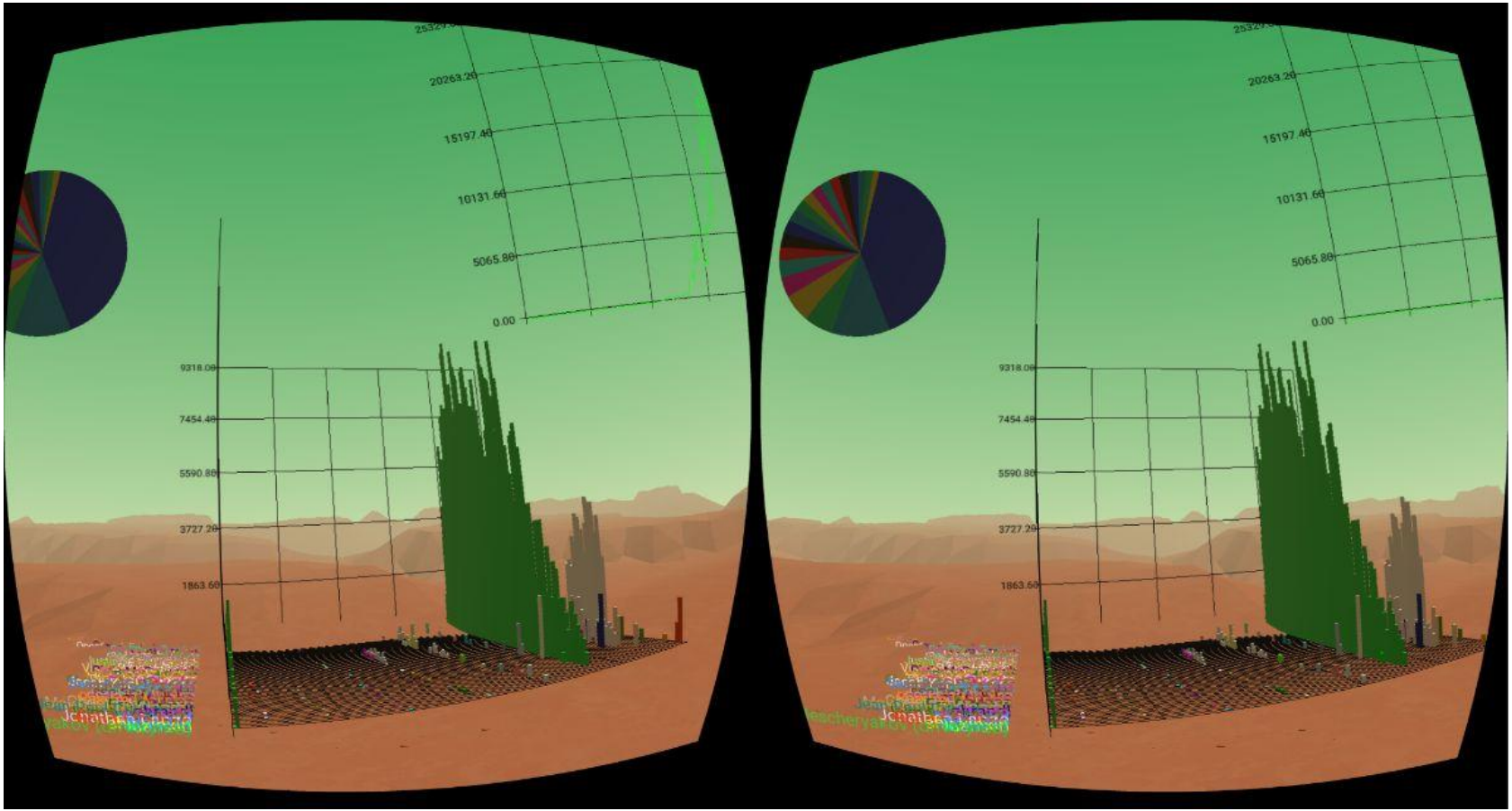
https://youtu.be/wPOU13b_HsU


25329.00
20263.20
15197.40
10131.60
5065.80
0.00
9318.00
7454.40
3590.80
3727.20
1863.60
Dmitry Mescheryakov (dmitrym)

/VR or full screen



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/customize

Change environment

Rotation of the charts

Free movement

Interaction

Augmented Reality (AR)

And… (future)

- Scale..
- More interaction…
- Platform…

https://dlumbrer.github.io/VBoard

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/demoVR

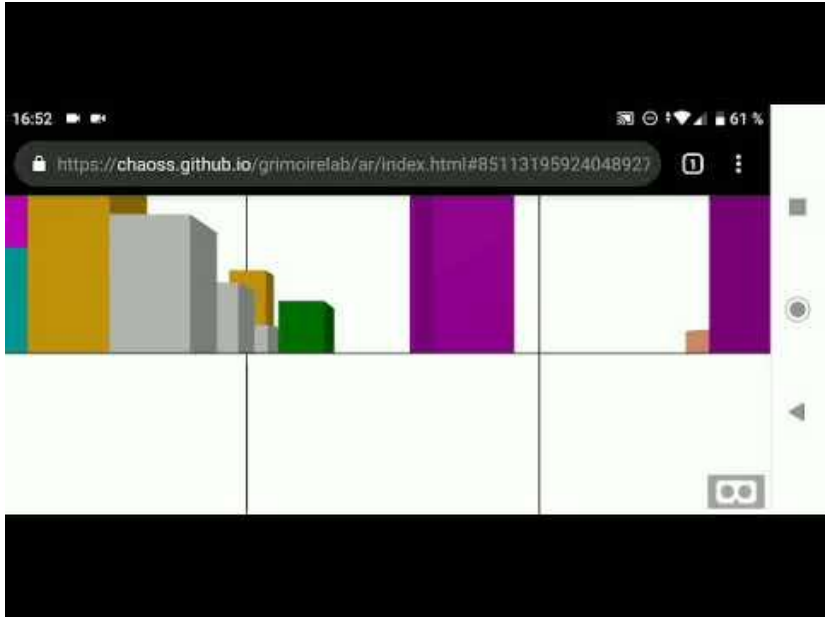
GrimoireLab data

Bitergia data

Openstack data

https://dlumbrer.github.io/VBoard/static_vr_**(bitergia/grimoirelab/openstack)**/index.html

/demoAR



https://dlumbrer.github.io/VBoard/static_ar/index.html

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/info

VBoard is hosted on GitHub: https://github.com/dlumbrer/VBoard

GPL-3.0 License

README.md with general information and installation steps

USER_GUIDE.md with the user guide of the application

Docker images on Docker-hub: https://hub.docker.com/r/dlumbrer/vboard/

dlumbrer/vboard:aframedc for the A-FrameDC version

dlumbrer/vboard:threedc for the ThreeDC version

How to generate 100% libre and open source QR's and markers for AR:

https://jgbarah.github.io/aframe-playground/ar-02/

More tutorials for A-Frame at https://jgbarah.github.io/aframe-playground

About

GrimoireLab

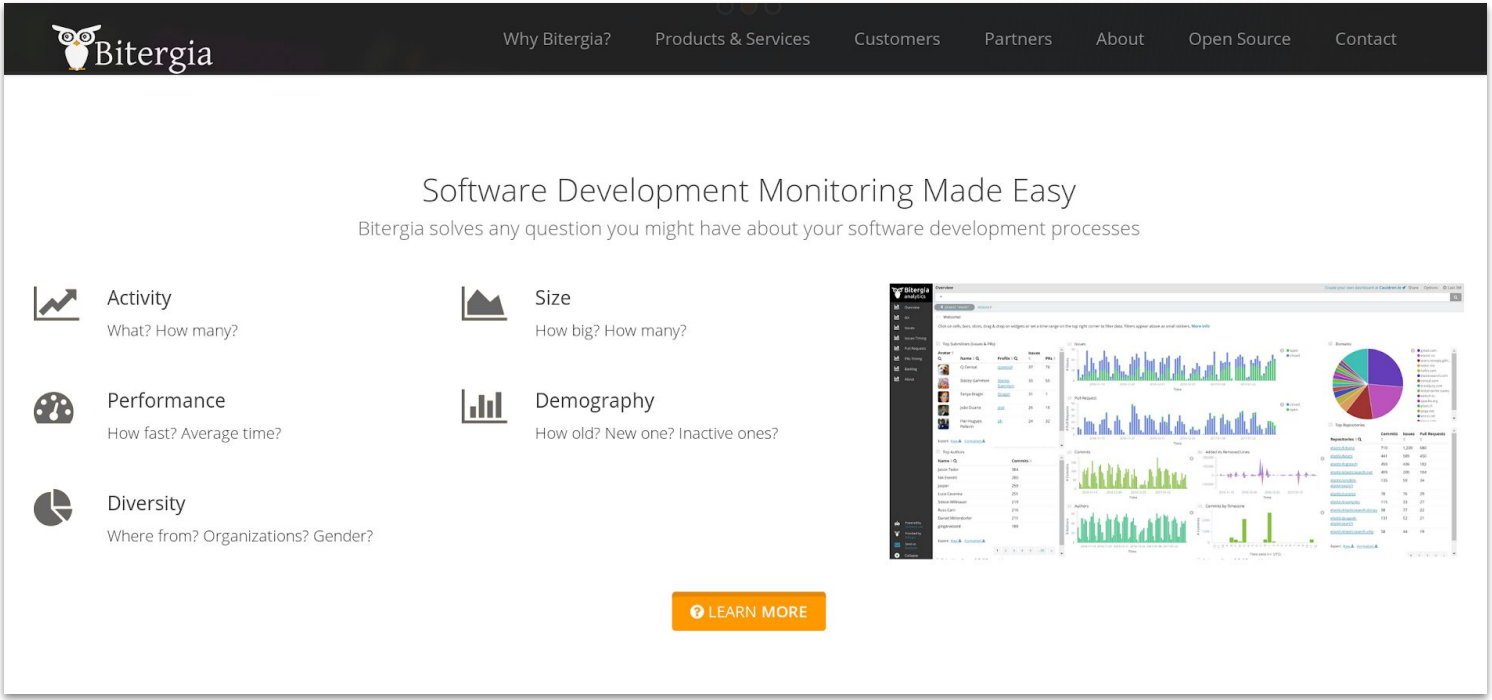
Bitrergia

Data retrieved using GrimoireLab

https://chaoss.github.io/grimoirelab/

Bitergia

bitergia.com



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Thanks!

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Front end and **Researcher** at **Bitergia**

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https://dlumbrer.github.io/VBoard