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# VBoard

Making web dashboards in 3D and VR

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



<https://dlumbler.github.io/VBoard>

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Apache - Total Visitors

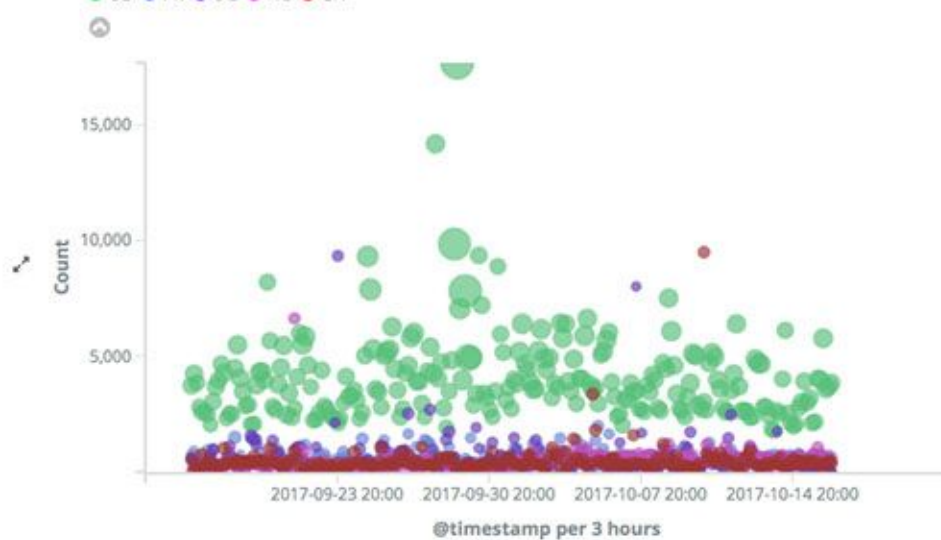
# 2,317,838

Apache - Unique Visitors

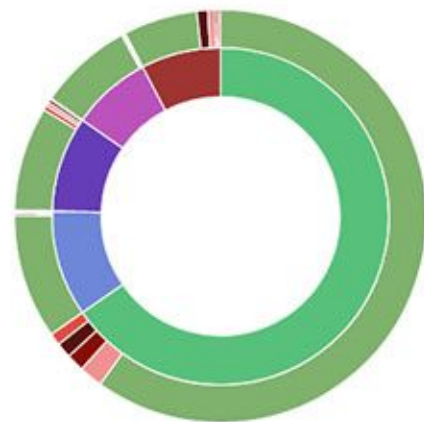
# 29,740

Apache - Bytes and Count

US FR DE NL CN



Apache - Country and Status



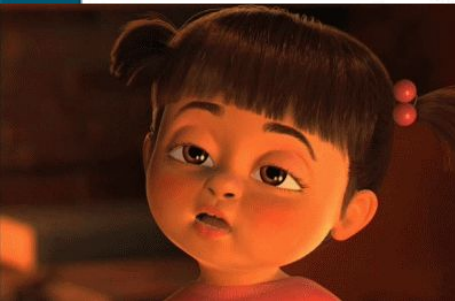
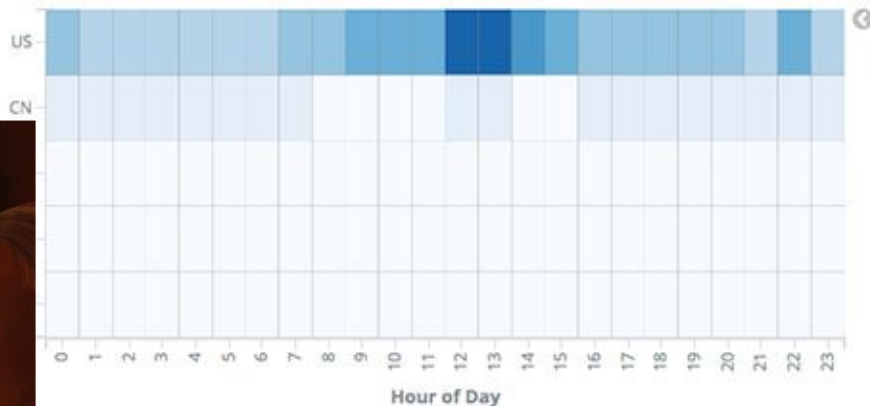
Apache - Unique Visitor...

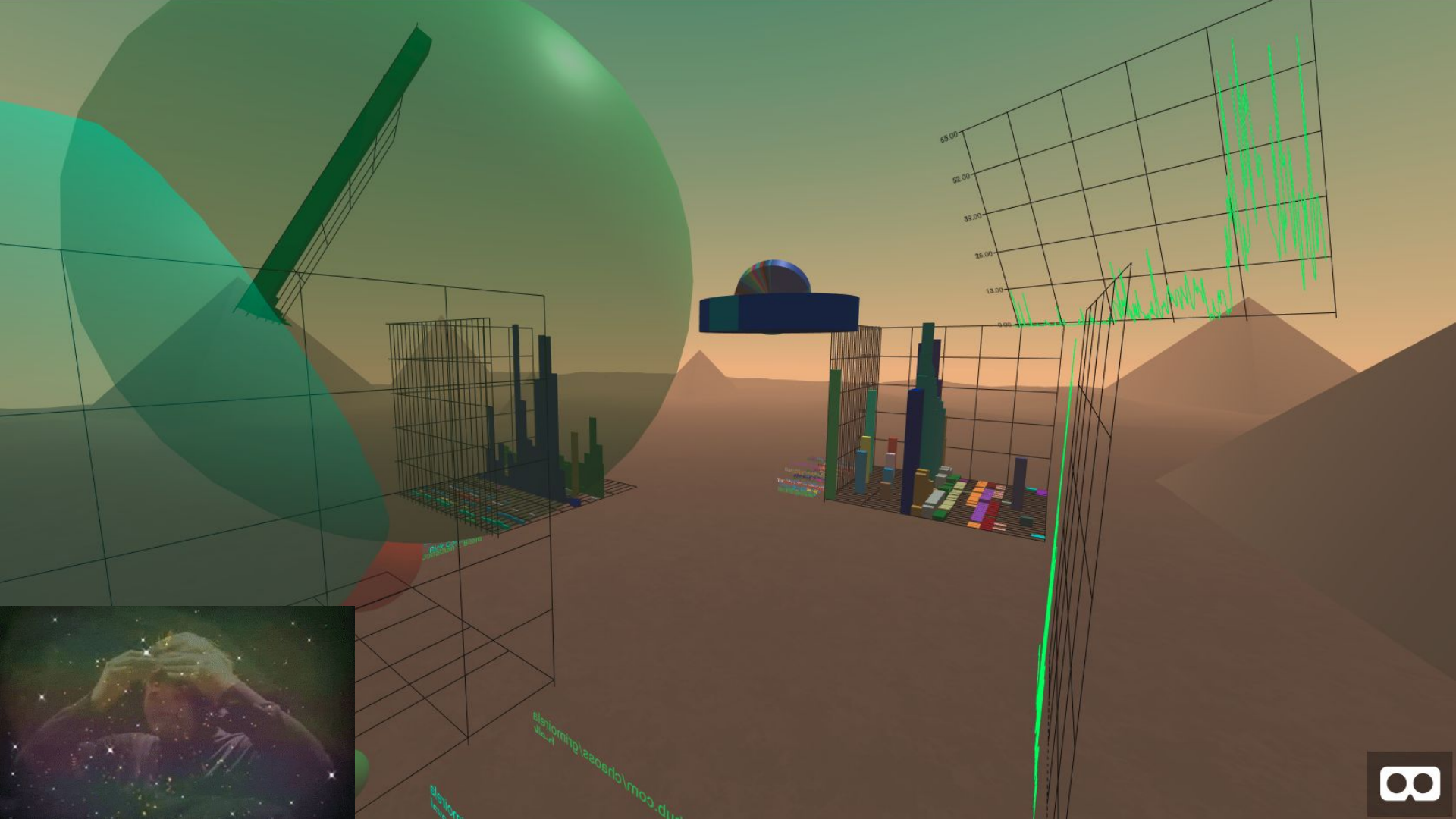
Apache - Country traffic by hour

Apache - Top OS small

City

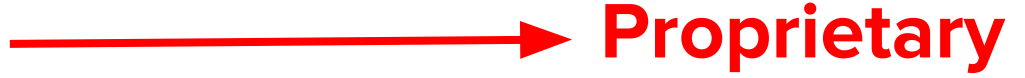
Count of Unique Clients





/open

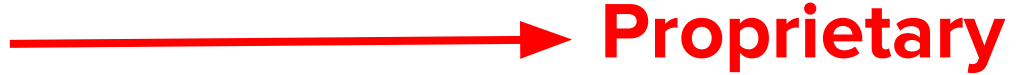
Existing tools



**Proprietary**

/open

Existing tools

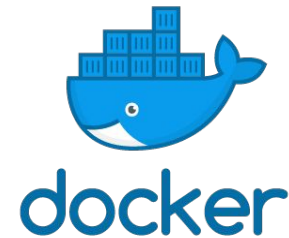


**Proprietary**

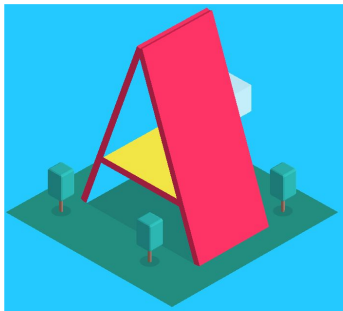


- Known frameworks
- High Level
- Web environment
- Avoid Walled Garden

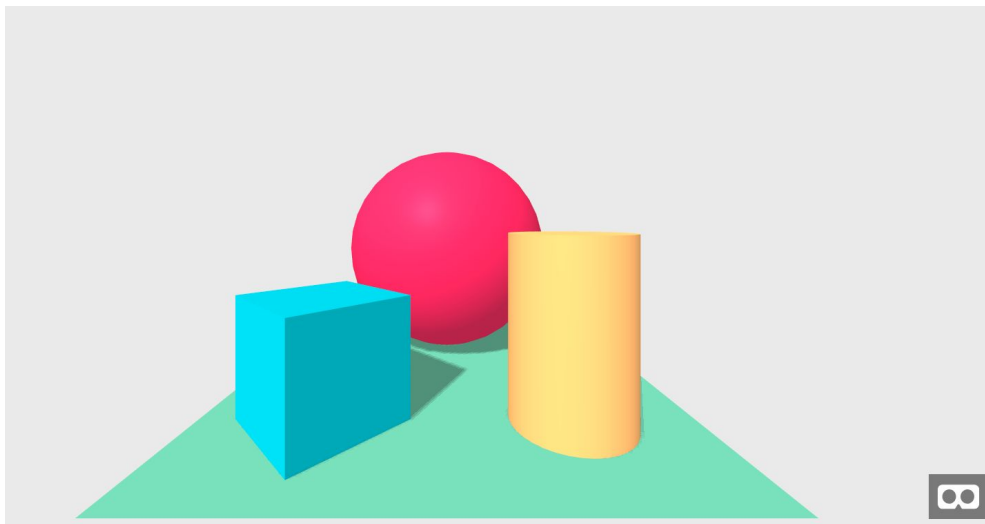
## Complex system of data visualization in 3D and VR



## /introduction

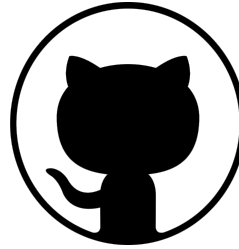


```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>Hello, WebVR! • A-Frame</title>
    <meta name="description" content="Hello, WebVR! • A-Frame">
    <script src="https://aframe.io/releases/0.8.2/aframe.min.js"></script>
  </head>
  <body>
    <a-scene background="color: #ECECEC">
      <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>
```



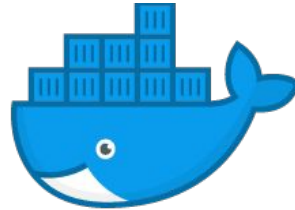
<https://aframe.io/>

Repository



Releases

Docker



Repo: <https://github.com/dlumbrrer/VBoard>



/init

There is no vboard index, creating it...

Index and mapping of VBoard created, welcome!

Making some configuration...

ERROR: An unexpected error appeared

ERROR: Impossible connect to Elasticsearch

Everything is right, welcome to VBoard!

Index:

Type:

Show Mapping

VisType:

Select Data

Metrics:

Principal metric

Type:

Buckets:

Principal bucket

Type:  Field:

Size:

Play

Show response (JSON)

Save visualization

Load visualization



/structure

VBoard Visualize Dashboard Show

- 
- 
- 



Index:

Type:

Show Mapping

VisType:

Select Data

Metrics:

Bars height  
Type:

Buckets:

X-Axis  
Type:  Field:   
Interval:

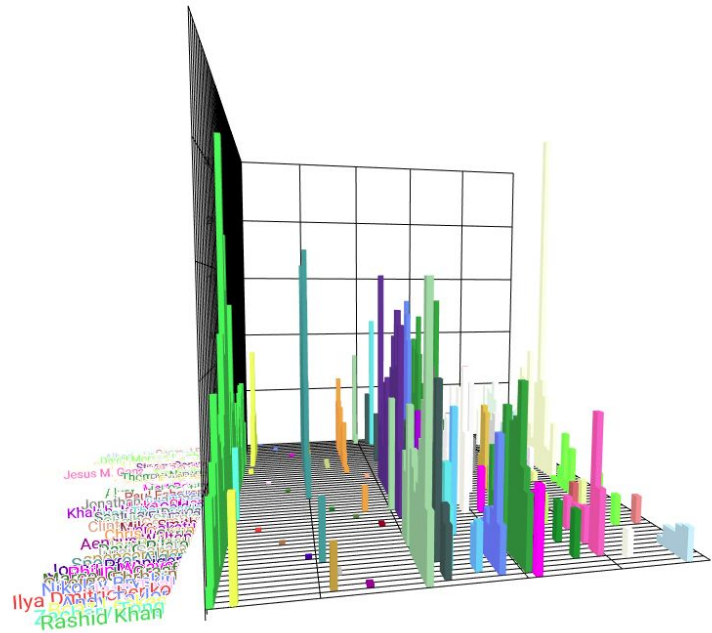
Z-Axis  
Type:  Field:   
Size:

Play

Show response (JSON)

Save visualization

Load visualization

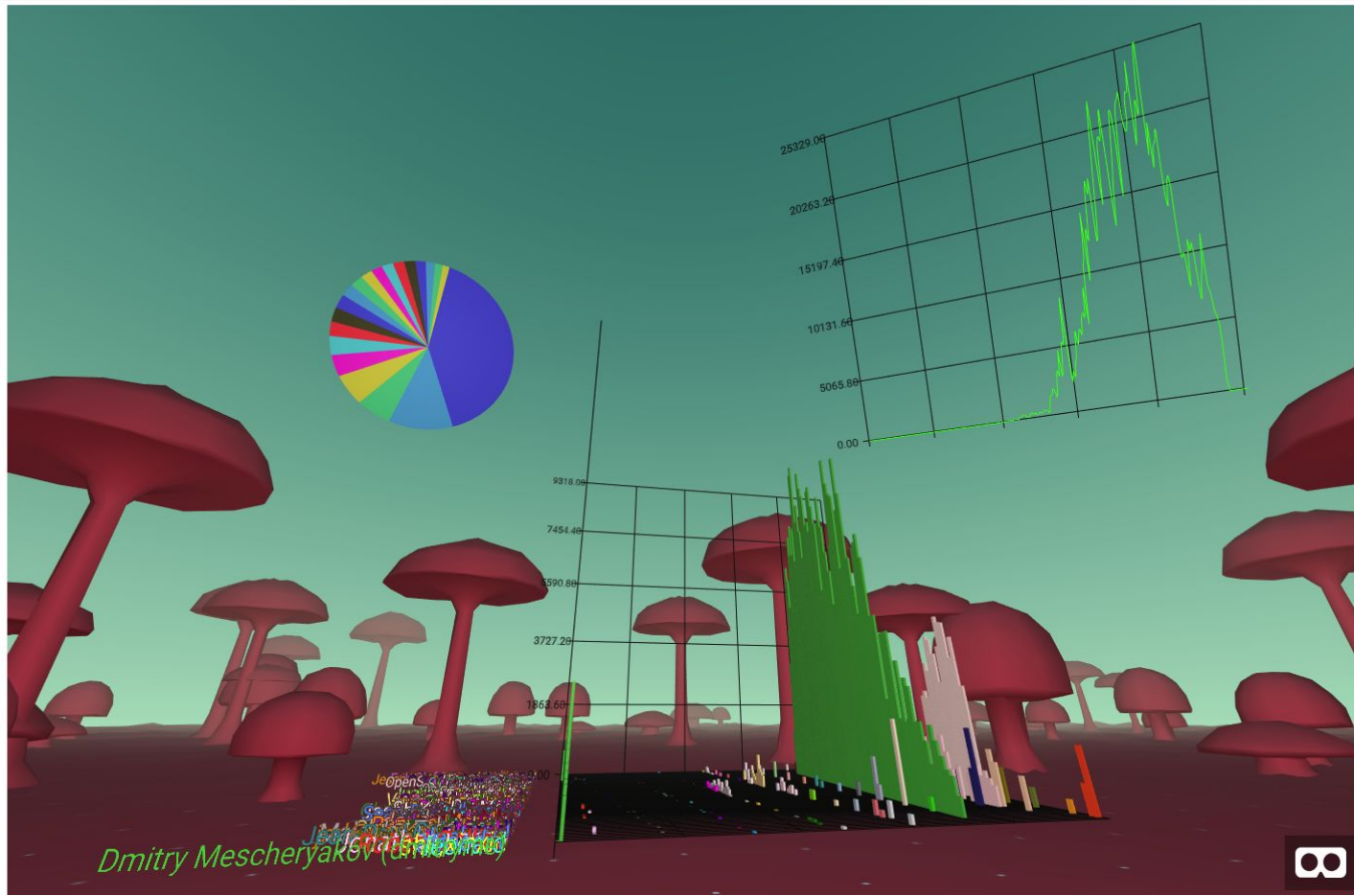


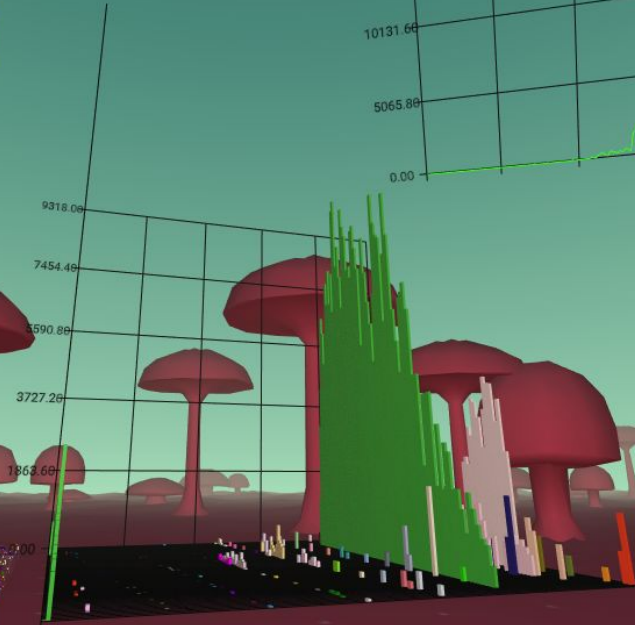
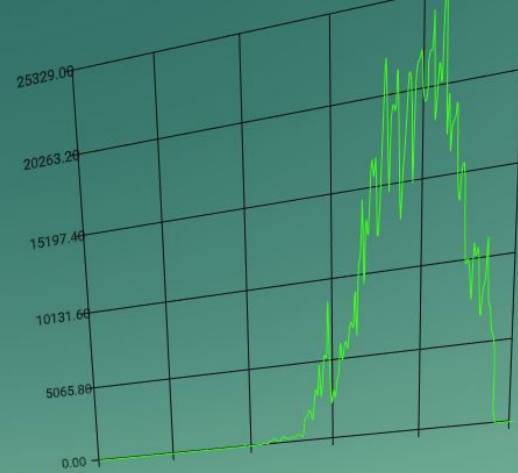
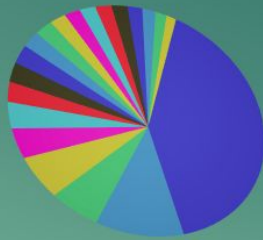
Click to add vis:

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

Options:

- Save Dashboard
- Load Dashboard



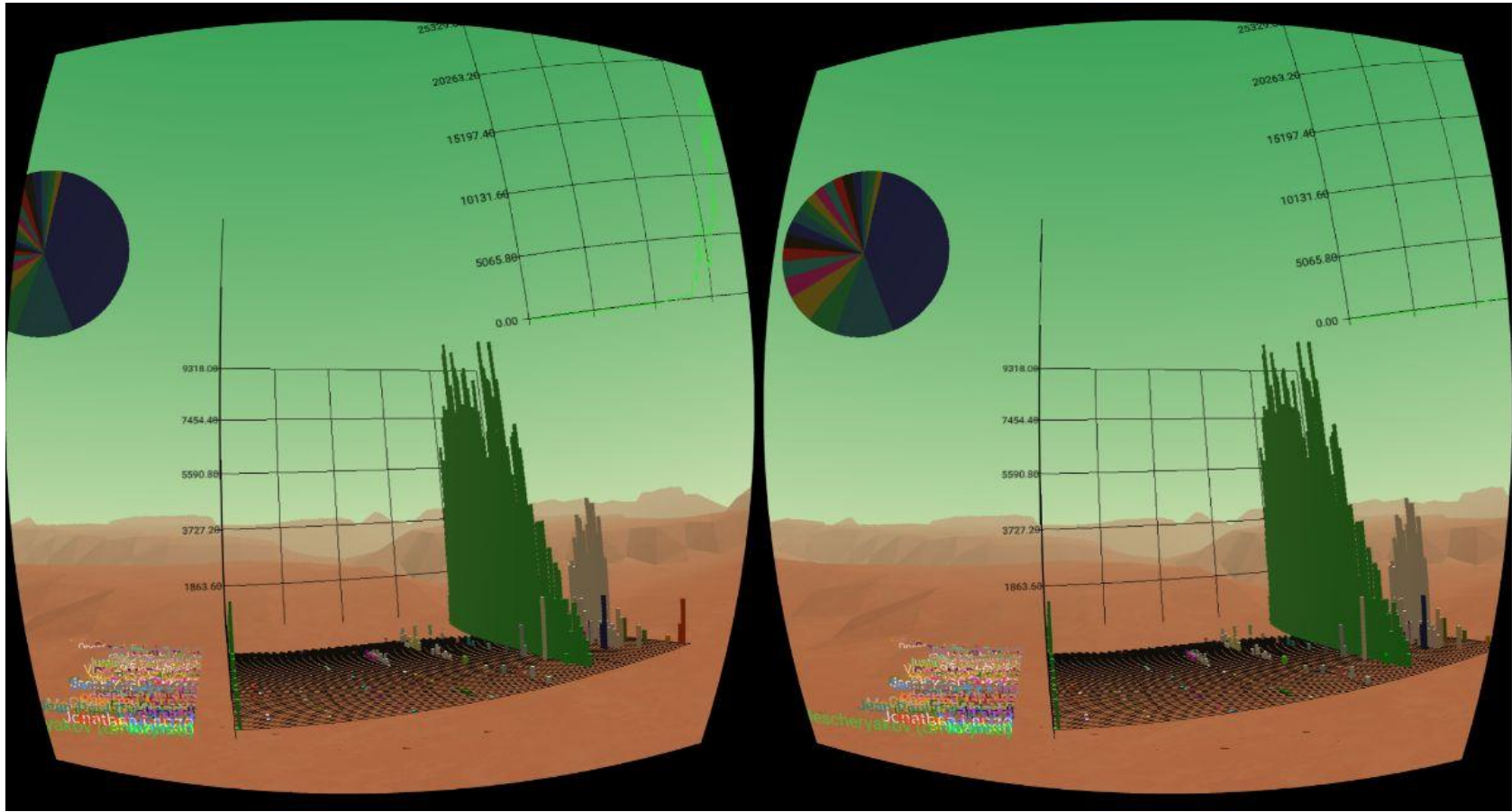


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JeOpenS

Dmitry Mescheryakov (dmesch)



/VR or full  
screen



/customize

**Change environment**

**Rotation of the charts**

**Free movement**

**Interaction**

**Augmented Reality (AR)**

And... (future)

Scale..

More interaction...

Platform...



<https://dlumbreer.github.io/VBoard>



/demoVR



**Bitergia data**

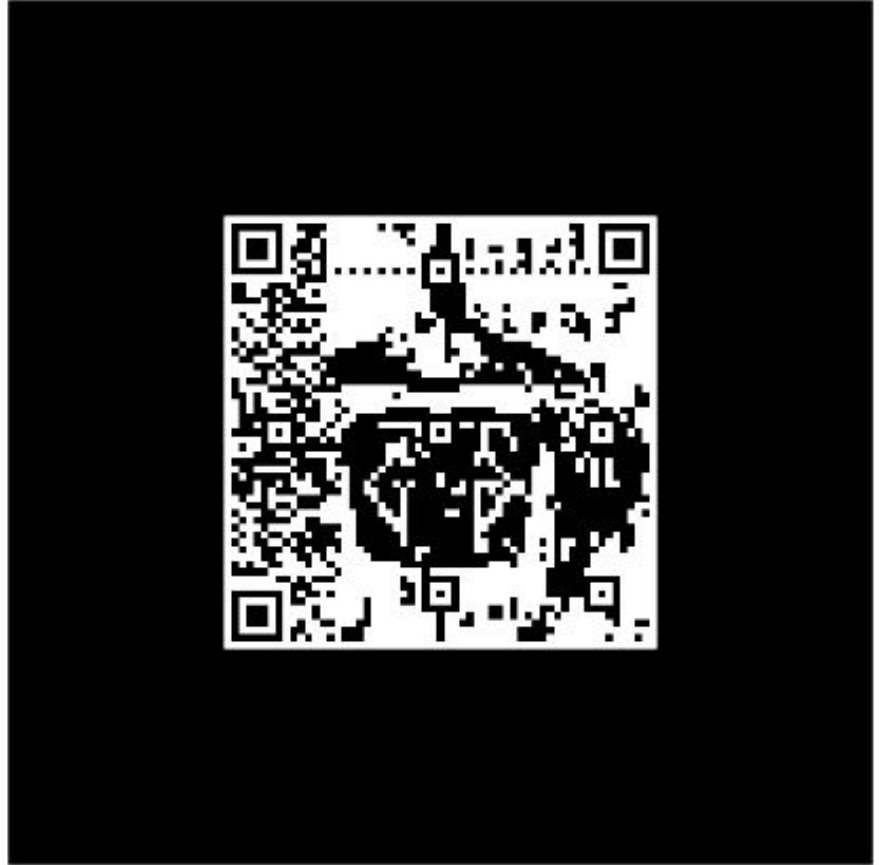
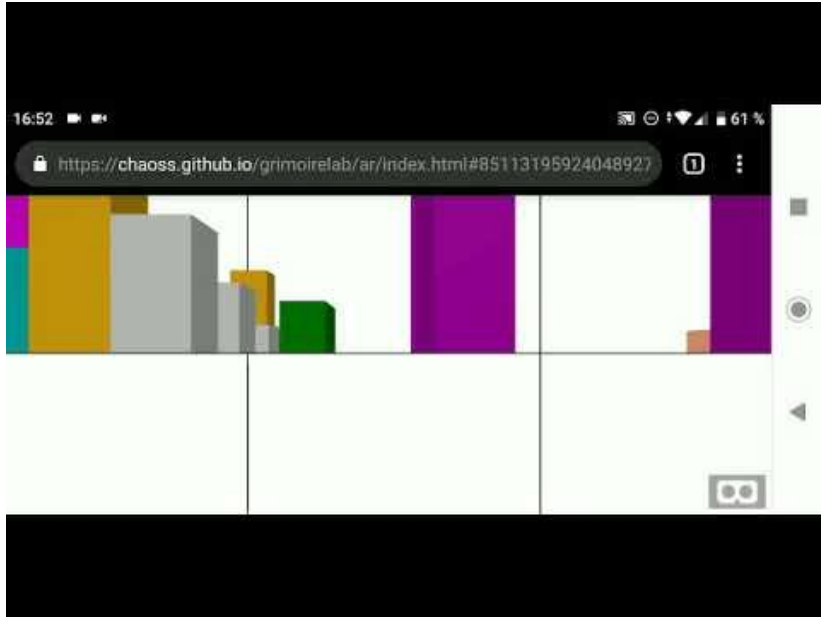
**GrimoireLab data**



**Openstack data**



/demoAR



[https://dlumbrrer.github.io/VBoard/static\\_ar/index.html](https://dlumbrrer.github.io/VBoard/static_ar/index.html)

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:afamedc** 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

Bitregia

Data retrieved using  
GrimoireLab



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



## Software Development Monitoring Made Easy

Bitergia solves any question you might have about your software development processes



### Activity

What? How many?



### Size

How big? How many?



### Performance

How fast? Average time?



### Demography

How old? New one? Inactive ones?



### Diversity

Where from? Organizations? Gender?



[LEARN MORE](#)

# Thanks!

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**dmorenolumb@gmail.com**



<https://dlumbrrer.github.io/VBoard>