

Data Visualization with JavaScript

How?

Prepare the data

Try **really really** hard to find the data

Where?

- 中国国家统计局
- 中华人民共和国中央人民政府
- 中华人民共和国中央人民政府数据
- 青悦空气质量历史数据库

Analysis of your data

- data type
- visual encoding...

Data Transformation

- .xls -> .csv
- .csv -> .json
- .geojson -> .topojson

Layout of your graph

- `barchart`
- `sparkline`
- `map(choropleth)`
- `pie`

Find the right tool for data visualization

- SVG, Canvas, WebGL
- D3
- NVD3, Dimple.js, Rickshaw, Chartio, RAW

Build Page Structure

```
.
├── d3.min.js
├── data
│   ├── shanghai.json
│   └── shanghai_air.csv
├── index.html
├── chart.js
└── style.css
```

Render your graph

Optimization

- Scales
- Axes
- Legends...

Interaction:

Transition, updates, interactive

Publish

Demo: <https://github.com/Wiredcraft/demo-d3>

What I've learned?

- Data < -- > Visualization
- **Always** appreciate the **hard work** of the data provider

Learning resources?

- [Codecademy](#)
- [Interactive Data Visualization for the Web](#)
- [D3 Tutorials](#)
- [D3 Wiki](#)
- [D3 Gallery](#)

QA?