

Nebula Graph In Actions

图数据库应用实操

古思为

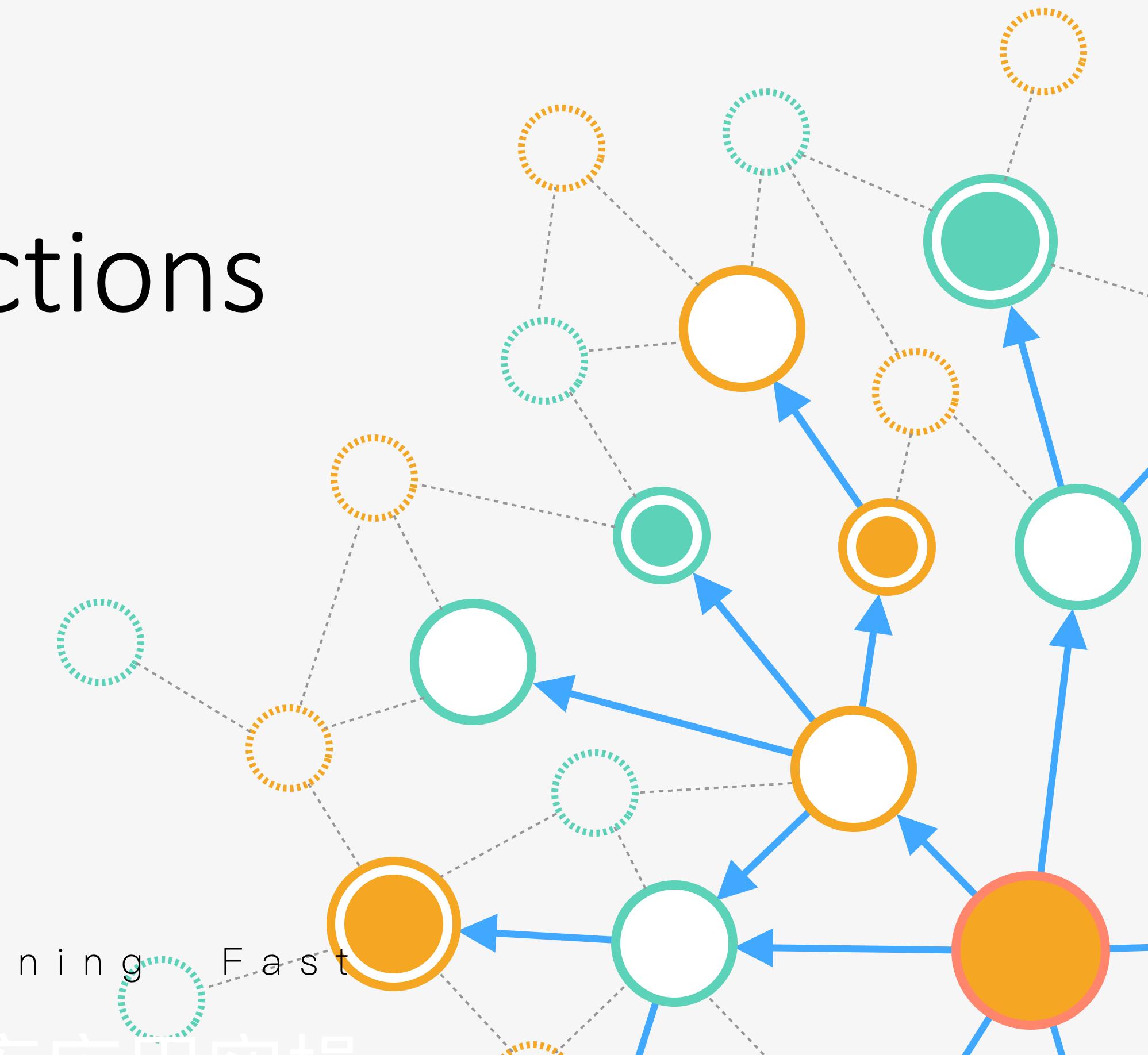
2021/04/09

Distributed

Scalable

Lightning

Fast



古思為

Nebula Graph 开发者布道师 @ vesoft

- 程序员
- 开源信徒  github.com/wey-gu
- 博客  siwei.io
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Mini Projects in actions

股权关系分析

- 上手容器化部署集群
- 构造股权关联关系数据，入库
- 穿透[股权关系](#)



[github.com/wey-gu/
nebula-shareholding-example](https://github.com/wey-gu/nebula-shareholding-example)

问答机器人

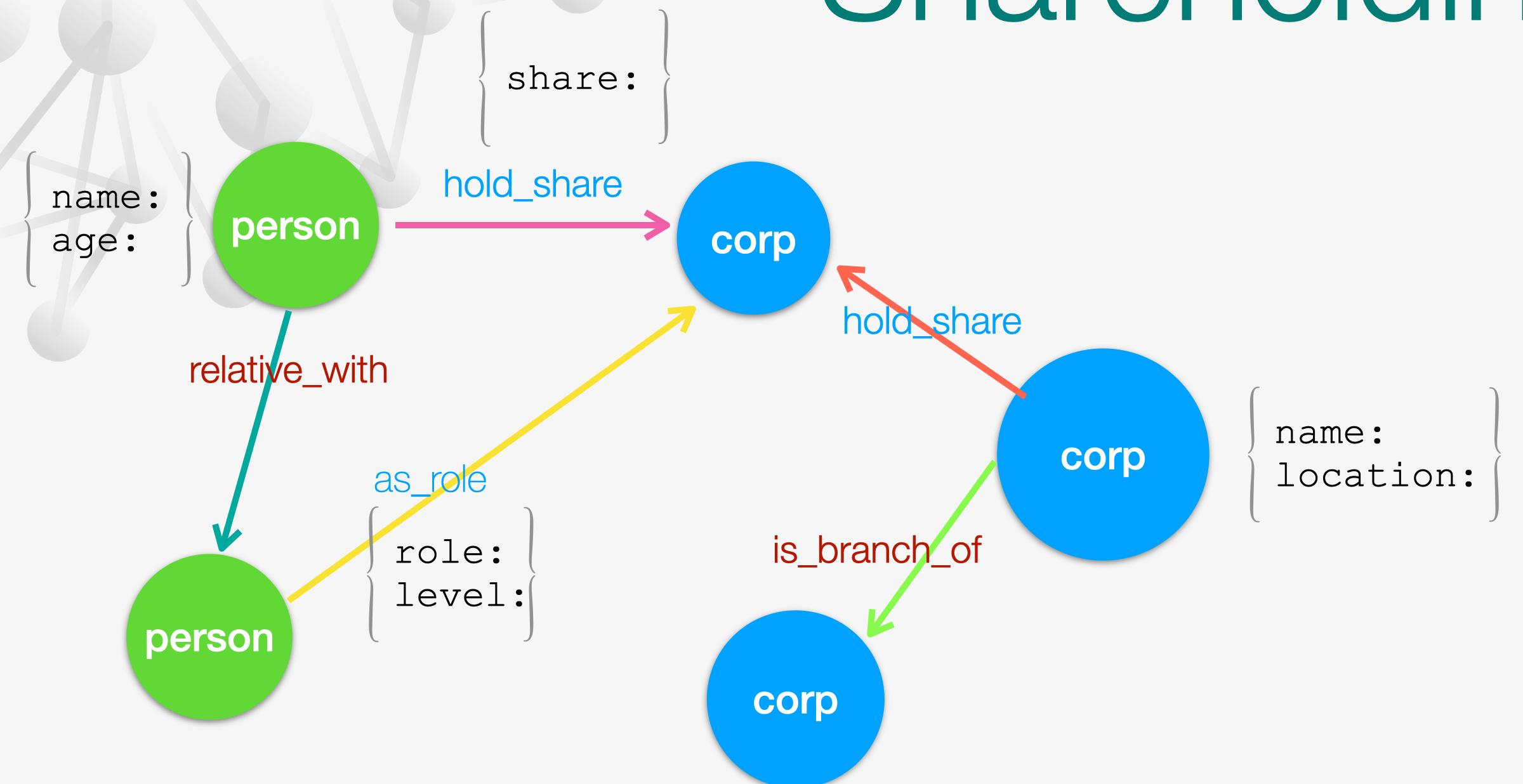
- 上手 Nebula Operator
- 图数据库应用架构演示
- 实现特定领域[问答机器人](#) Siwi



github.com/wey-gu/nebula-siwi

<https://nebula-graph.io>

Shareholding



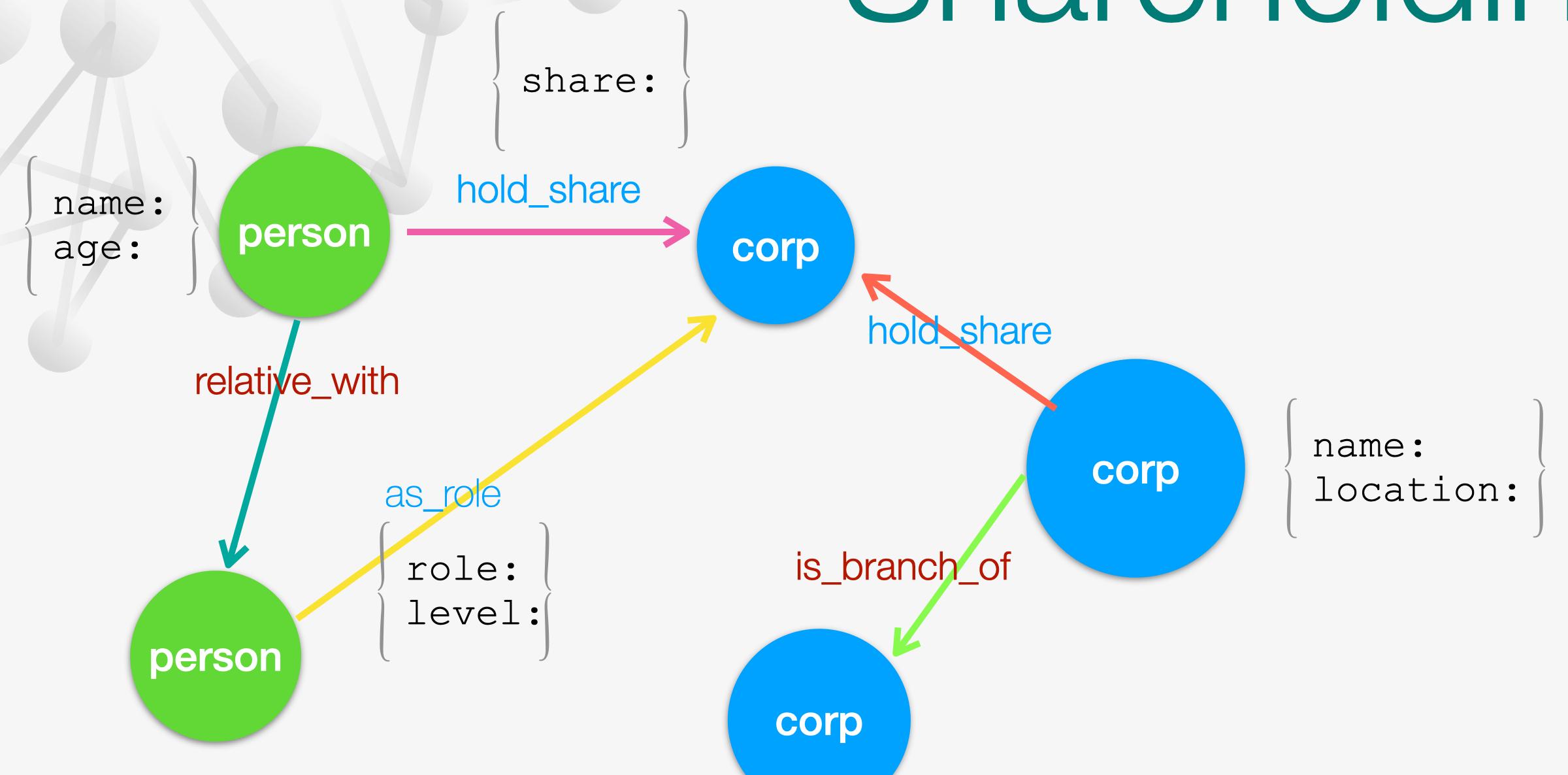
[wey-gu/nebula-shareholding-example](https://github.com/wey-gu/nebula-shareholding-example)

<https://nebula-graph.io>

Shareholding



NebulaGraph

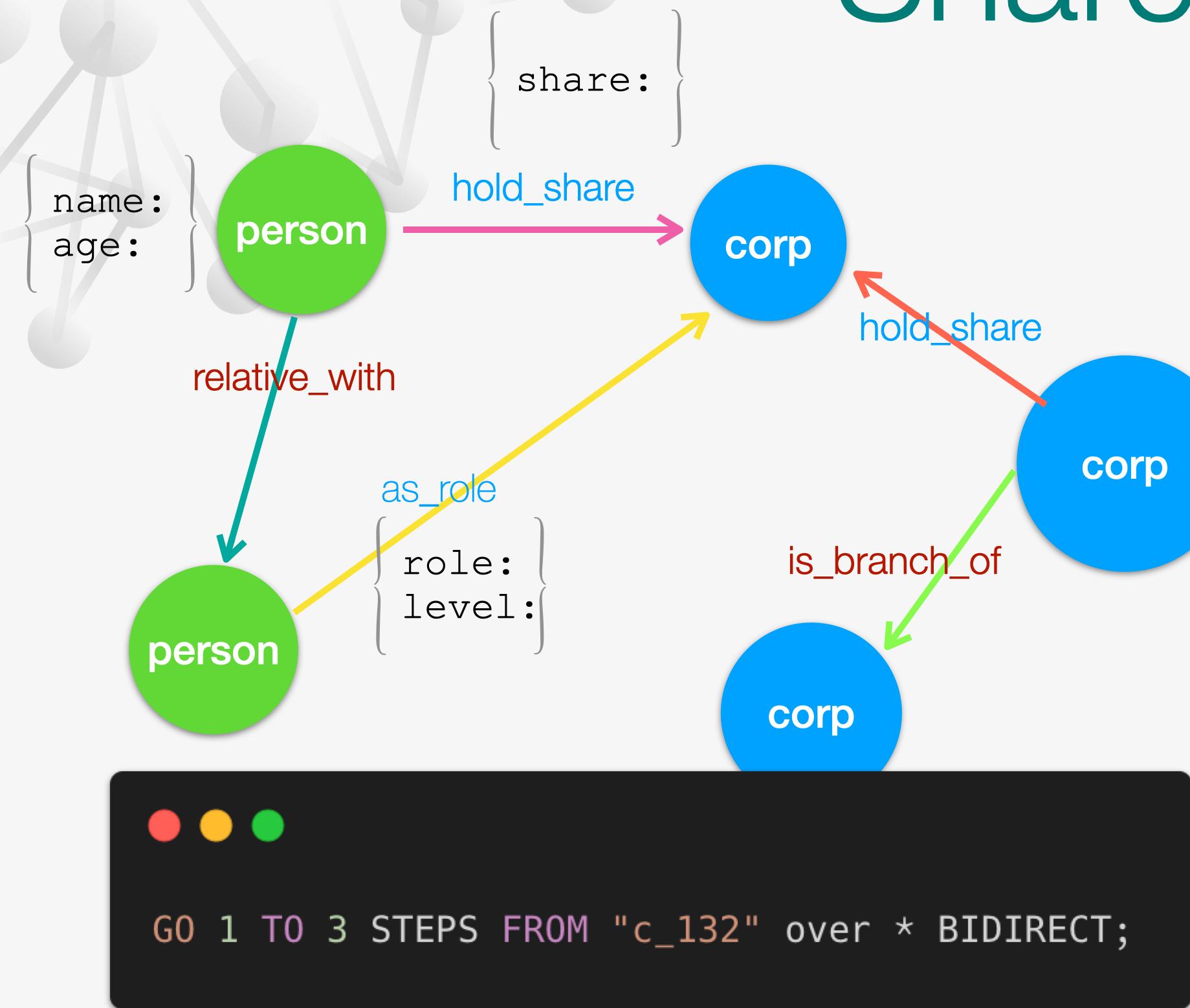


G0 1 T0 3 STEPS FROM "c_132" over * BIDIRECT;

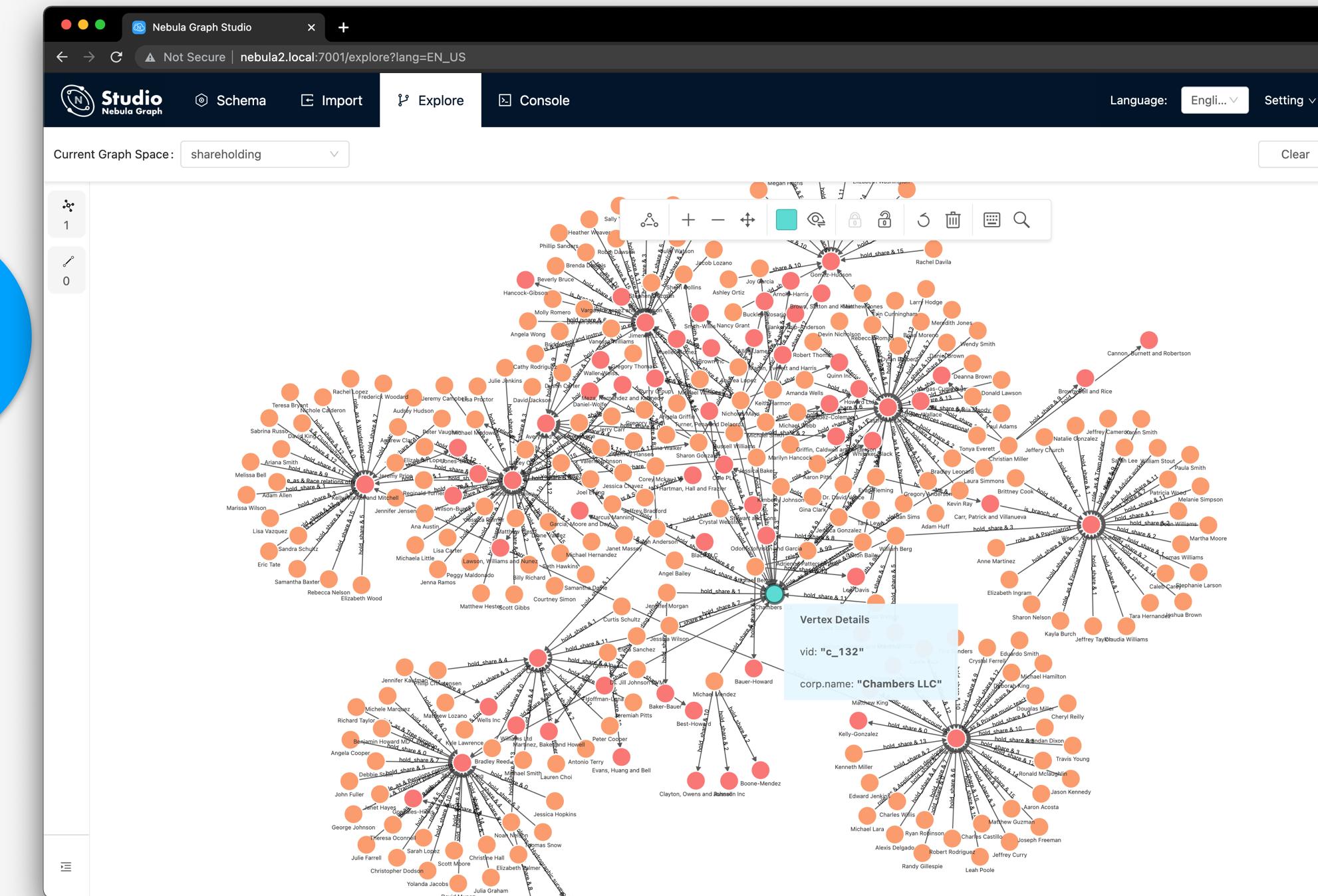


wey-gu/nebula-shareholding-example

<https://nebula-graph.io>



Shareholding



wey-gu/nebula-shareholding-example

Get hands dirty

股权关系数据 Mini Project

Nebula Operator 实现

KUBEBUILDER SCAFFOLD

```
.  
├── apis  
..  
|   └── apps  
|   └── cmd  
|       └── ngctl  
|       └── controller-manager  
|   └── config  
|       └── crd  
└── pkg  
    ├── controller  
    ├── ngctl  
    ├── nebula  
    └── scheduler  
└── hack  
└── doc  
└── tests  
    └── e2e
```

CRD

```
apiVersion: apps.nebula-graph.io/v1alpha1  
kind: NebulaCluster  
metadata:  
  name: nebula  
spec:  
  graphd:  
    resources:  
      requests:  
        cpu: "500m"  
        memory: "500Mi"  
    replicas: 3  
    image: vesoft/nebula-graphd  
    version: v2.5.0  
...  
  reference:  
    name: statefulsets.apps.kruise.io  
    version: v1  
  schedulerName: default-scheduler
```

CONTROL LOOP

```
while True  
    actual_state = get_state(context)  
    expected_state = get_expected(context)  
    if actual_state == expected_state:  
        continue  
    else:  
        reconcile(context)
```

CALLING NEBULA CLUSTER

```
func (s *storUpd) updPhase(mc nebula.MI) {  
    if err := mc.Balance(); err != nil {  
        return err  
    }  
    hostItem, err := mc.ListHosts()  
    if err != nil {  
        return err  
    }  
    if !mc.IsBalanced(hostItem) {  
        if err := mc.Balance(); err != nil {  
            return err  
        }
```

Nebula Operator Roadmap

- Rolling Upgrade
- Auto Scaling
- Integration with other Services

Check out our Github Repo and contribute!
[vesoft-inc/nebula-operator](https://github.com/vesoft-inc/nebula-operator)

roadmap of **nebula-operator**



Nebula Landscape

Nebula 社区生态非常丰富，并且还在日益拓展，欢迎同学们了解、参与贡献。

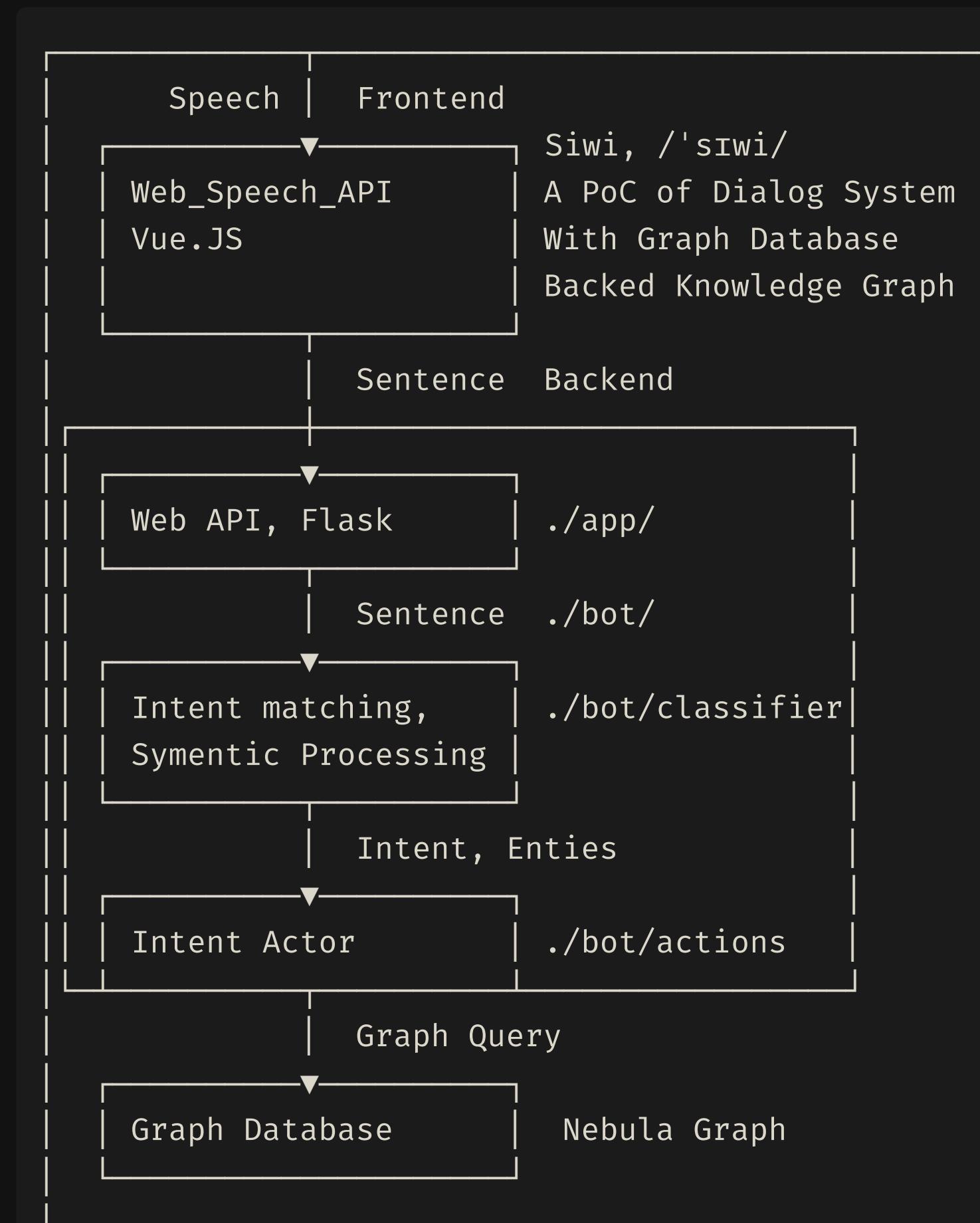
- Deployment, Monitoring
- Data Visualization
- Algorithm, Analytic
- Clients, Connectors, ETL



知识图谱



ARCH 架构



CODE 代码

```
.├── README.md  
├── src  
│   ├── siwi  
│   │   ├── app  
│   │   └── bot  
│   │       ├── actions  
│   │       ├── bot  
│   │       ├── classifier  
│   │       └── test  
│   └── siwi_frontend  
│       ├── README.md  
│       ├── package.json  
│       └── src  
│           ├── App.vue  
│           └── main.js  
└── wsgi.py
```

Siwi-API Backend
Web Server, take HTTP req > call
Bot API
Take Intent, Slots, Query KG here
Entrypoint of the Bot API
Symentic Parse, Intent Match, etc.
Example Data as equivalent/mock
Browser End
Listen to user and pass Qs to bot
Intent Matching, Entity Extraction



wey-gu/nebula-siwi

Get hands dirty

图谱问答机器人 Mini Project

回顾

- 两种方式部署
- 体验了两种导入数据方式
- 体验了 Algorithm
- 体验了 K8s Scaling
- 尝试股权穿透、构建图谱机器人

👤 wey-gu

🐦 wey_gu

👤 siwei.io

“获取关于 Nebula Graph 的有用信息



微信公众号，Nebula Graph 的最新信息 ->



文档：docs.nebula-graph.com.cn

Nebula Graph 架构、实践文章：nebula-graph.com.cn/posts



视频和教程：space.bilibili.com/472621355

入门文章索引：zhuanlan.zhihu.com/p/368781105

用户问答论坛：discuss.nebula-graph.com.cn



github.com/vesoft-inc/nebula



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<https://nebula-graph.io>



谢谢



GitHub: [vesoft-inc/nebula](https://github.com/vesoft-inc/nebula)



Twitter: [@NebulaGraph](https://twitter.com/@NebulaGraph)



Join the Nebula Graph community :
<https://discuss.nebula-graph.io>