

InstaMasta

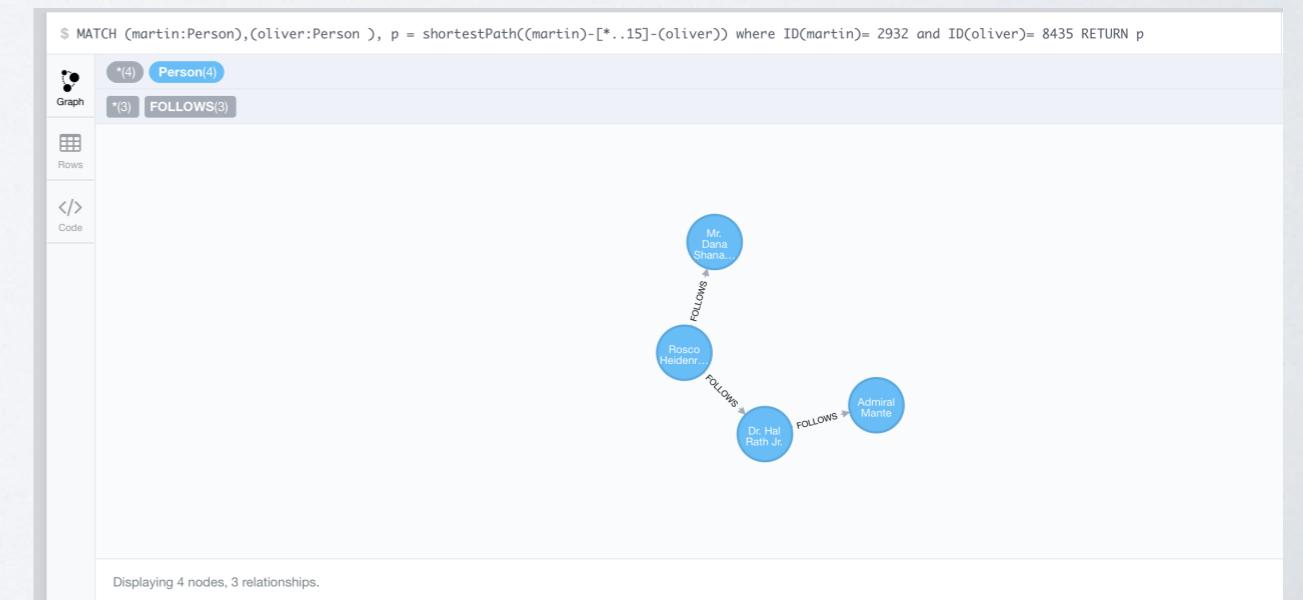
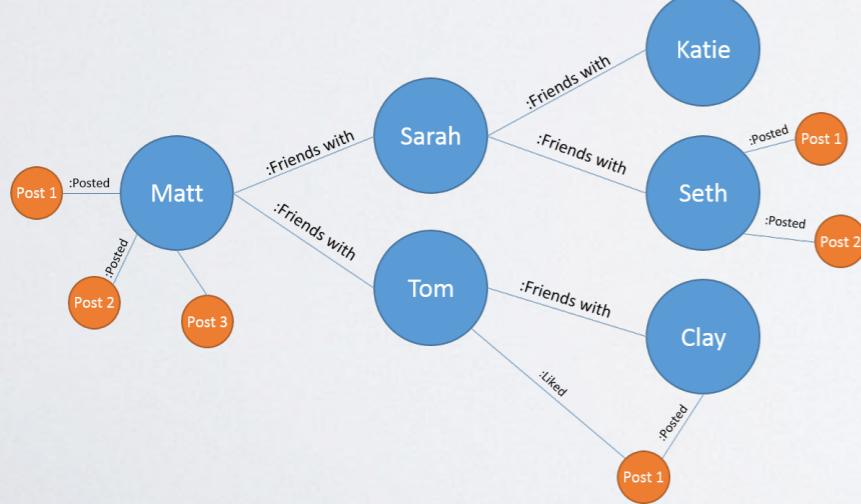
Graphing Instagram Activity

INSIGHT.

Can Gulec

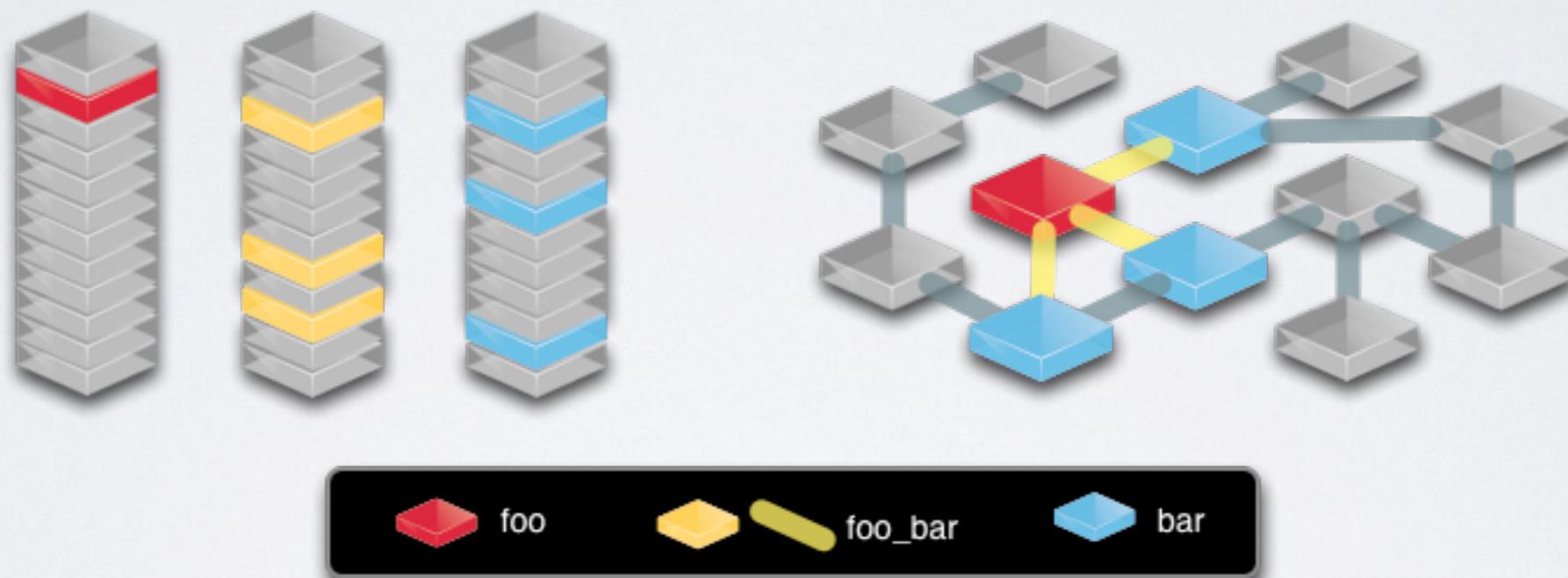
DEMO TIME!

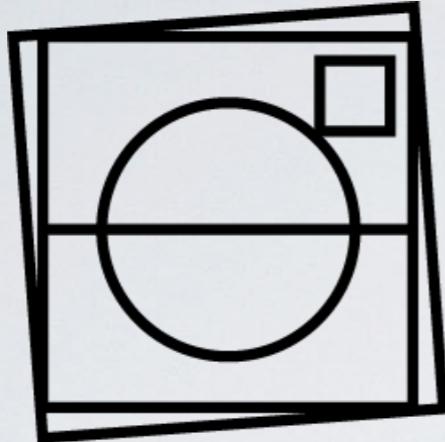
instamasta.com



Why?

Relational Databases vs Graph Databases

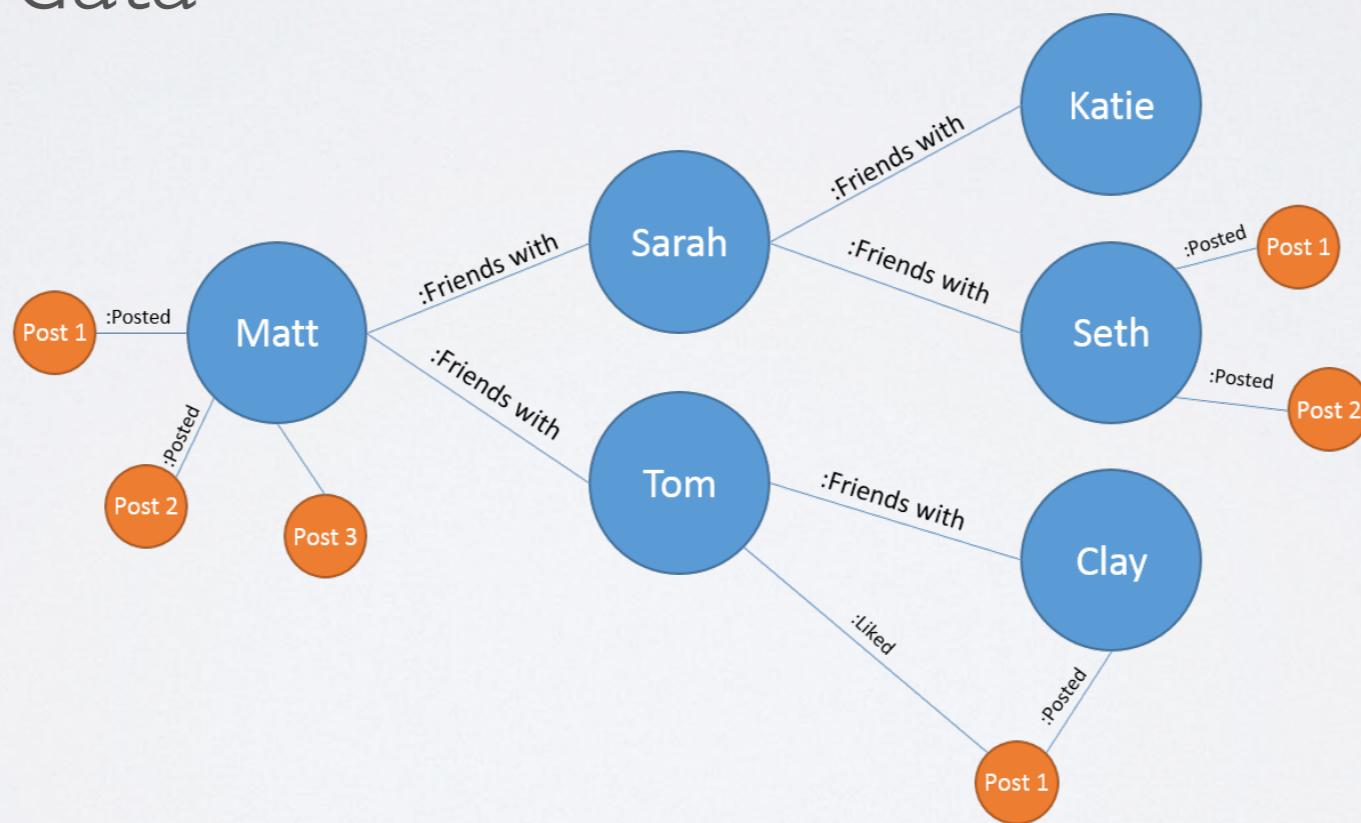




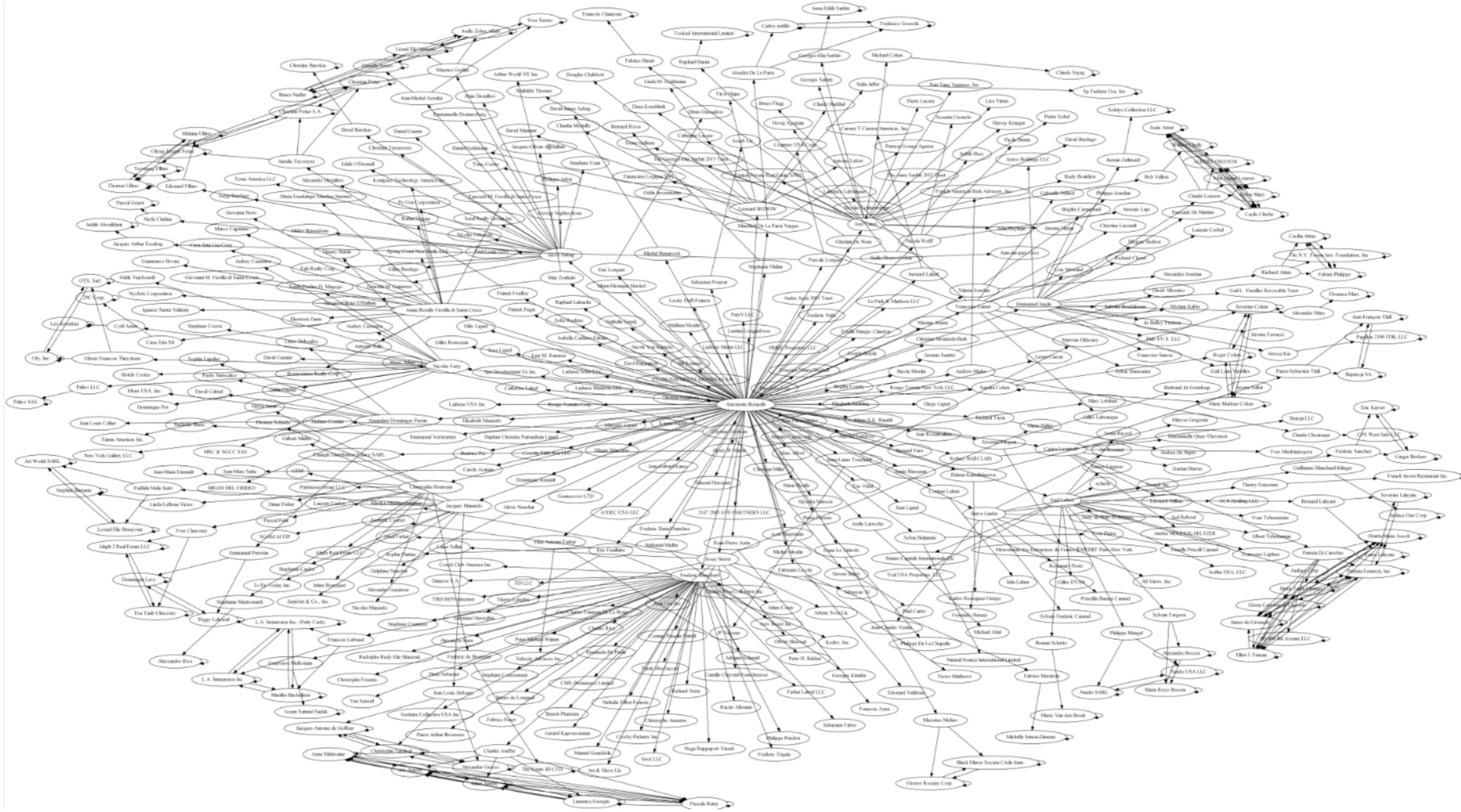
InstaMasta

Graphing Instagram Activity

- Tool to explore social networks via graphs
- Engineered data



- Interaction based / Whiteboard friendly

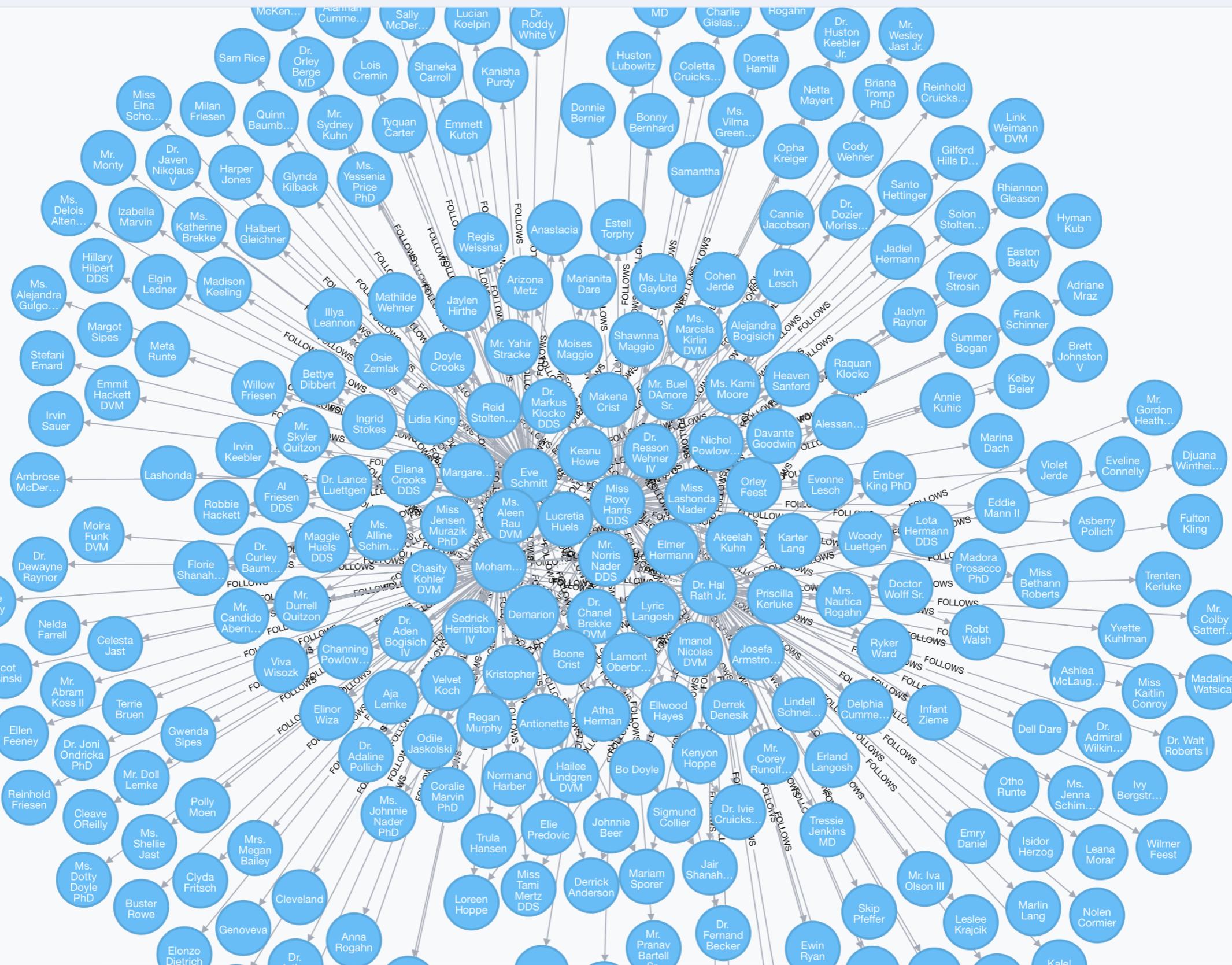


```
$ match n where ID(n)= 194232 return
```

Person(267)

***(395) FOLLOW(S)(395)**

NEO4



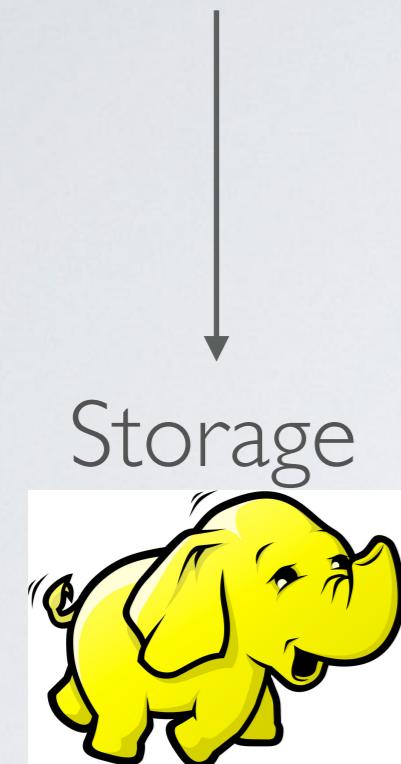
Displaying 267 nodes, 395 relationships (completed with 5 additional relationships)

AUTO-COMPLETE  ON

How?

Pipeline

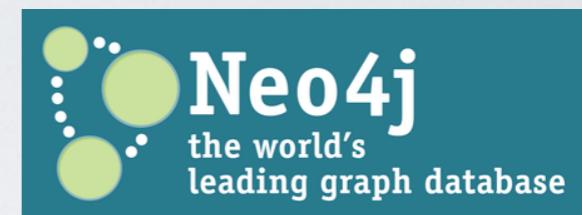
Simulated Data



Processing



Database



Front-end



Problems encountered

- API limitations
- Neo4j Relationships / Cypher
- Generating data
- DevOps
- Breaking things



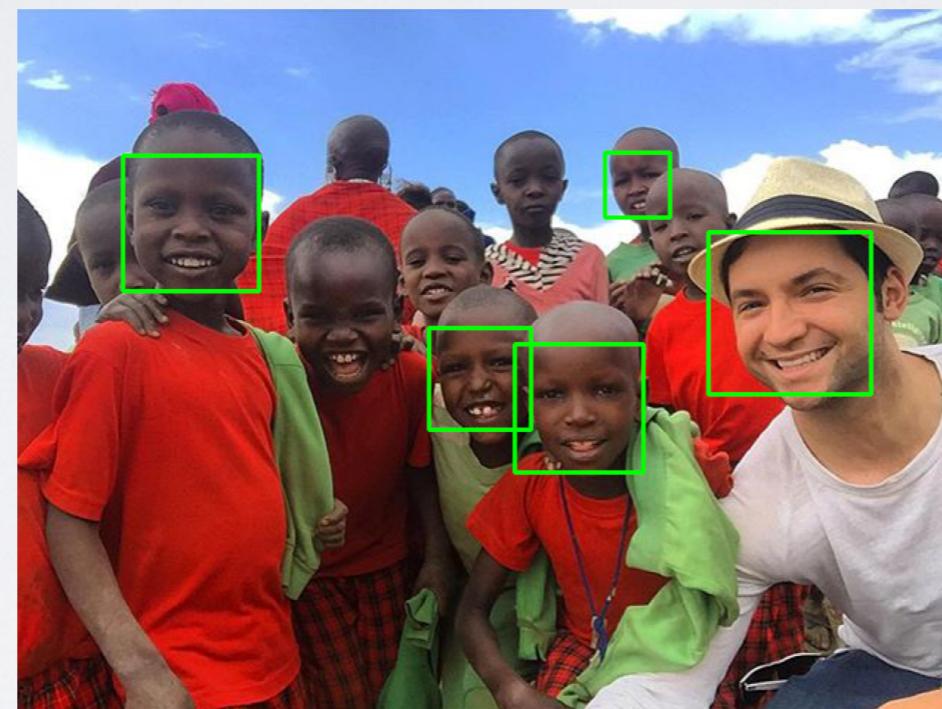
Quantifying Self Absorption

Quantifying Self-Absorption



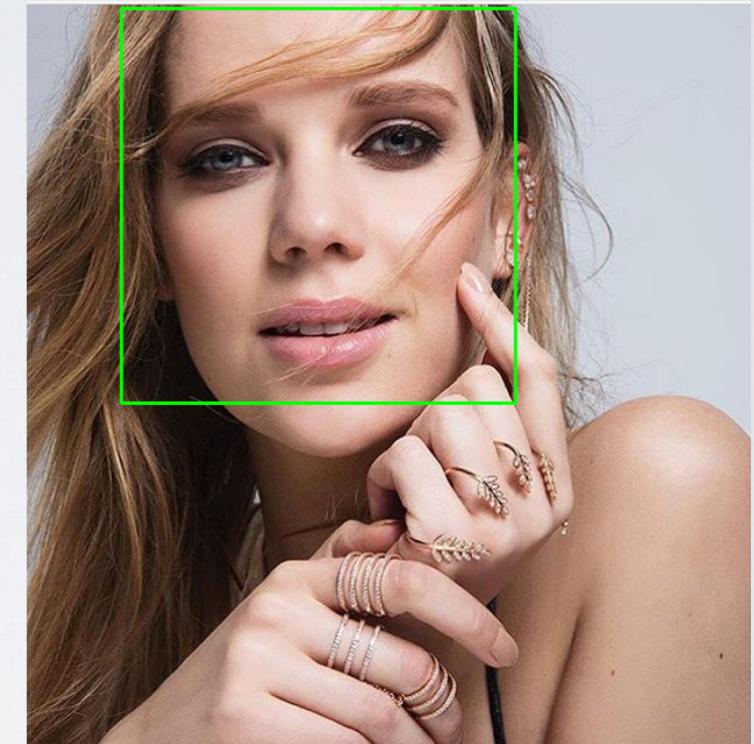
Artsy

Face Count: 0



Social

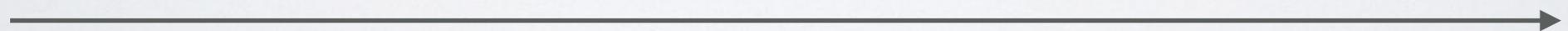
Face Count: 5



Self-Absorbed

Face Count: 1

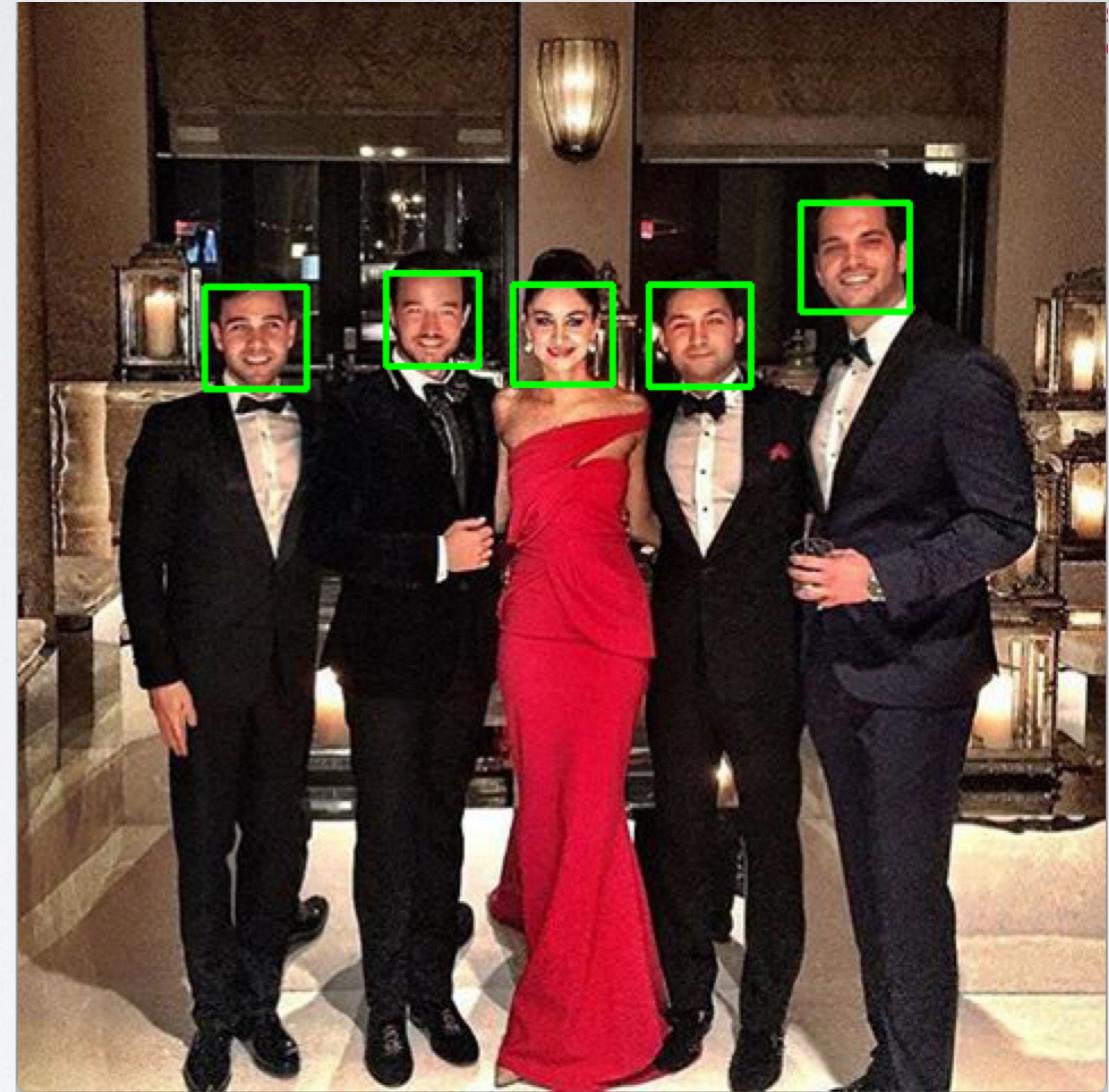
Levels of Self-Absorption



Input



Output



Classification: **Social**

About me



Name

Can Gulec

Education

B.S. Computer Science & B.B.A
Finance

Current Position

Assistant Vice President of Projects &
Strategic Planning at Interaudi Bank

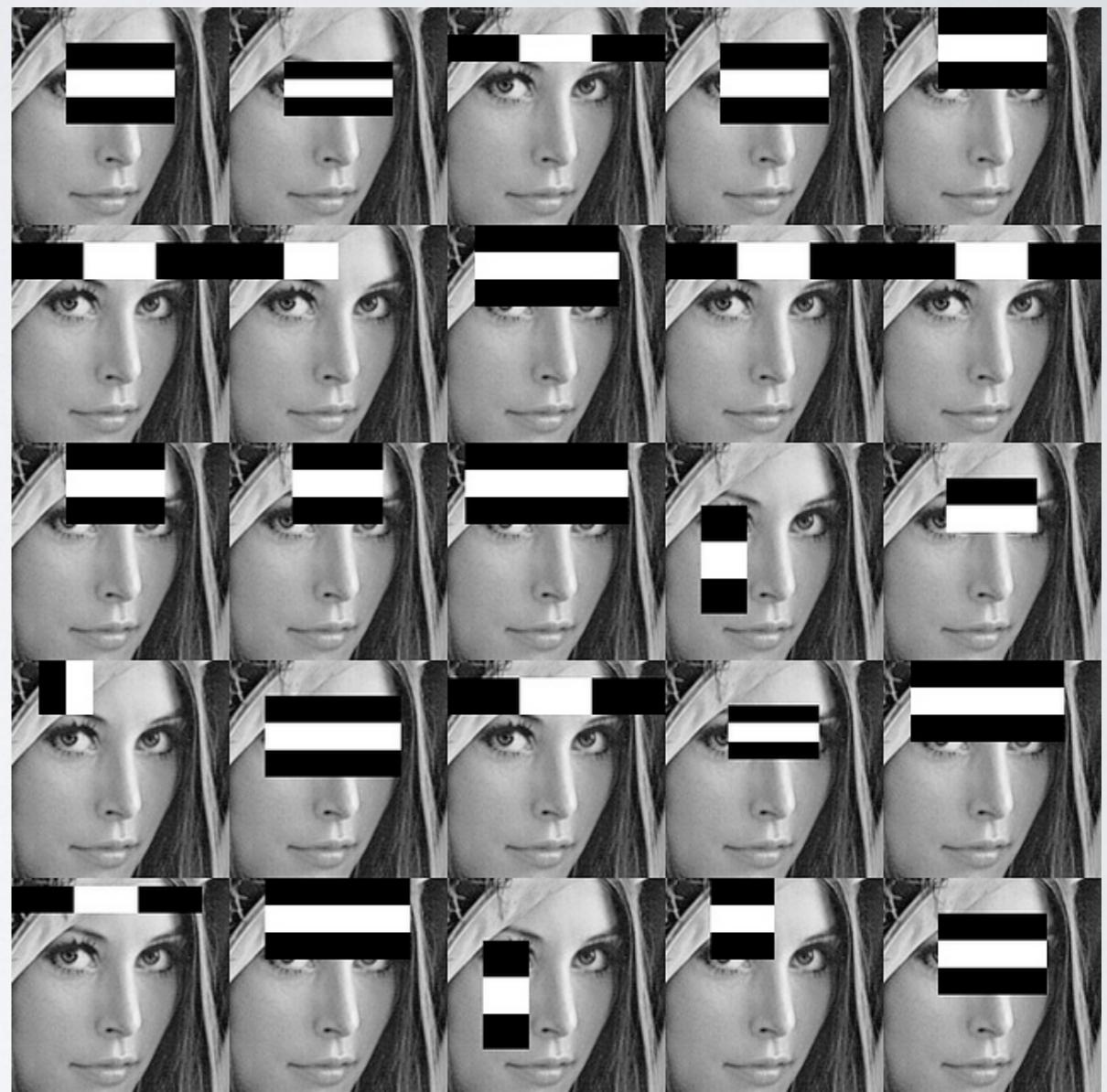


Additional Slides

Open CV - Haar Cascades

Object Detection using Haar feature-based cascade classifiers is an effective object detection method proposed by Paul Viola and Michael Jones in their paper, "Rapid Object Detection using a Boosted Cascade of Simple Features" in 2001.

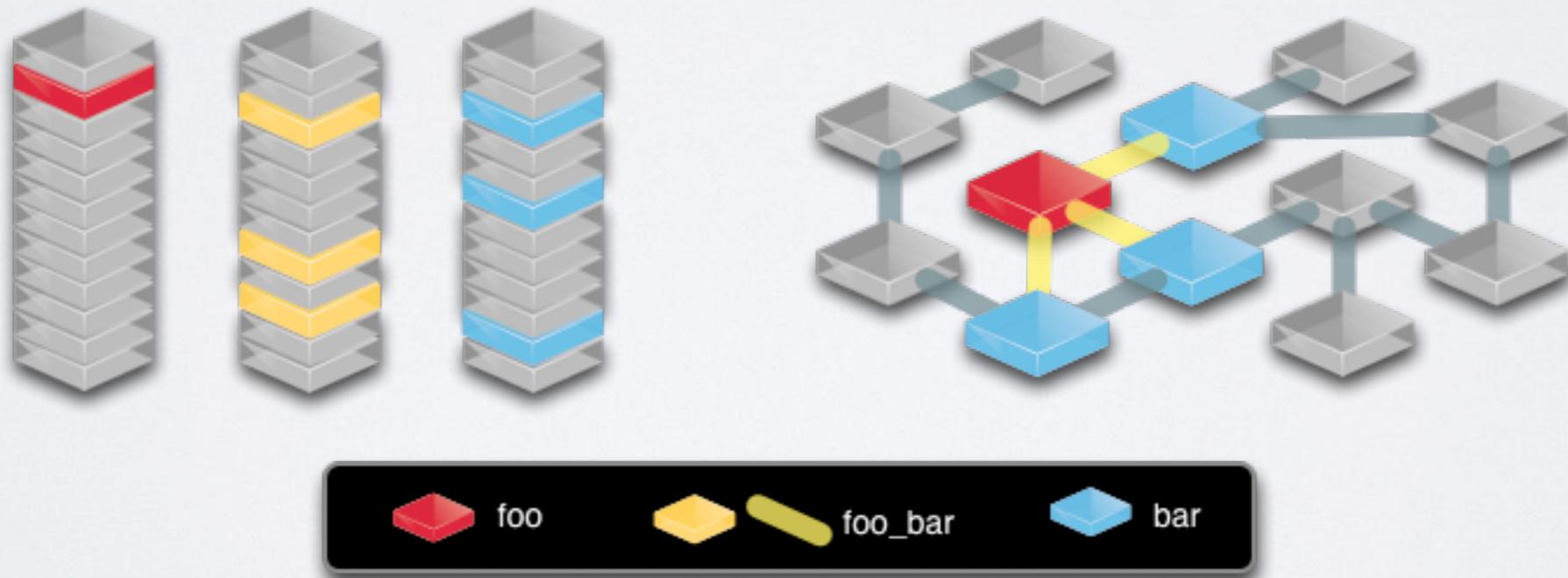
It is a machine learning based approach where a cascade function is trained from a lot of positive and negative images. It is then used to detect objects in other images.



Neo4j Details

- It happens to use doubly-linked lists for everything, but the idea is the same: for each node, there's a list of its incoming and outgoing relationships.
- If you know the ID of a node or relationship, **a direct lookup is O(1)**.
- It's **great at localized searches**. E.g. to get the people you follow, it just needs to follow your node's linked list of relationships -- and the performance of this won't change if there are 100 people globally or 1M.
- It's **not great at aggregation**. E.g. the nodes or relationships aren't stored in any sorted order, so deriving the 20 most popular users requires a full scan.
- It suffers from the "**supernode problem**".

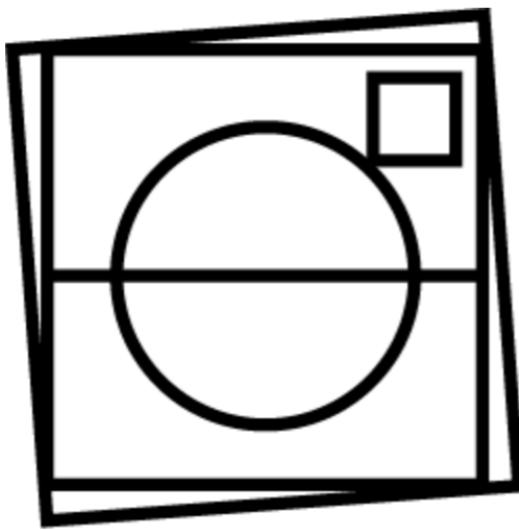
There are no join tables



Platform Policy

16. Don't use the Instagram API to simply display User Content, import or backup content, or manage Instagram relationships, without our prior permission.
17. Don't apply computer vision technology to User Content, without our prior permission.





InstaMasta

Explore 1,834,209 users and 2,498,975 posts

Please input a user id...

Go!

Calculate the shortest path between two users

From

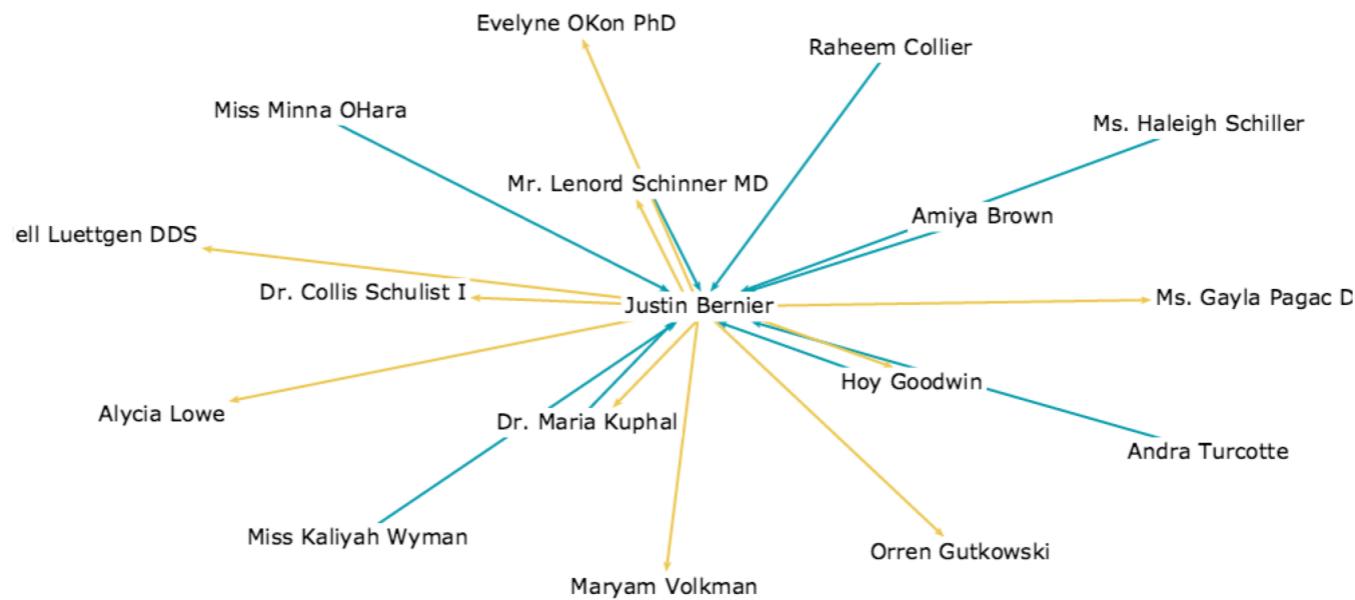
To

Go!

Hello Justin Bernier

Following: 10

Followers: 9



Following

Users that you follow are:

Name	Username
Maryam Volkman	aWLiFauLWeTj
Dr. Maria Kuphal	VPYmzcAeTsGu
Alycia Lowe	XLveULJEHtTa
Evelyne OKon PhD	fGhRpwPthXsR
Hoy Goodwin	RuwYMQasltoh
Dr. Collis Schulist I	aXkEzvdgZqSv
Ms. Gayla Paqac DVM	wnoMqfBzrCHs

Followers

Users that follow you are:

Follower Name	Username
Dr. Maria Kuphal	VPYmzcAeTsGu
Mr. Lenord Schinner MD	NzbOSGOIIYOd
Hoy Goodwin	RuwYMQasltoh
Miss Kaliyah Wyman	kJnfLoMCSYpB
Miss Minna OHara	MFZRvNltGuoH
Amiya Brown	bvSBLKYomKHi
Andra Turcotte	NwUZYFqofTLo

The shortest undirectional path is:

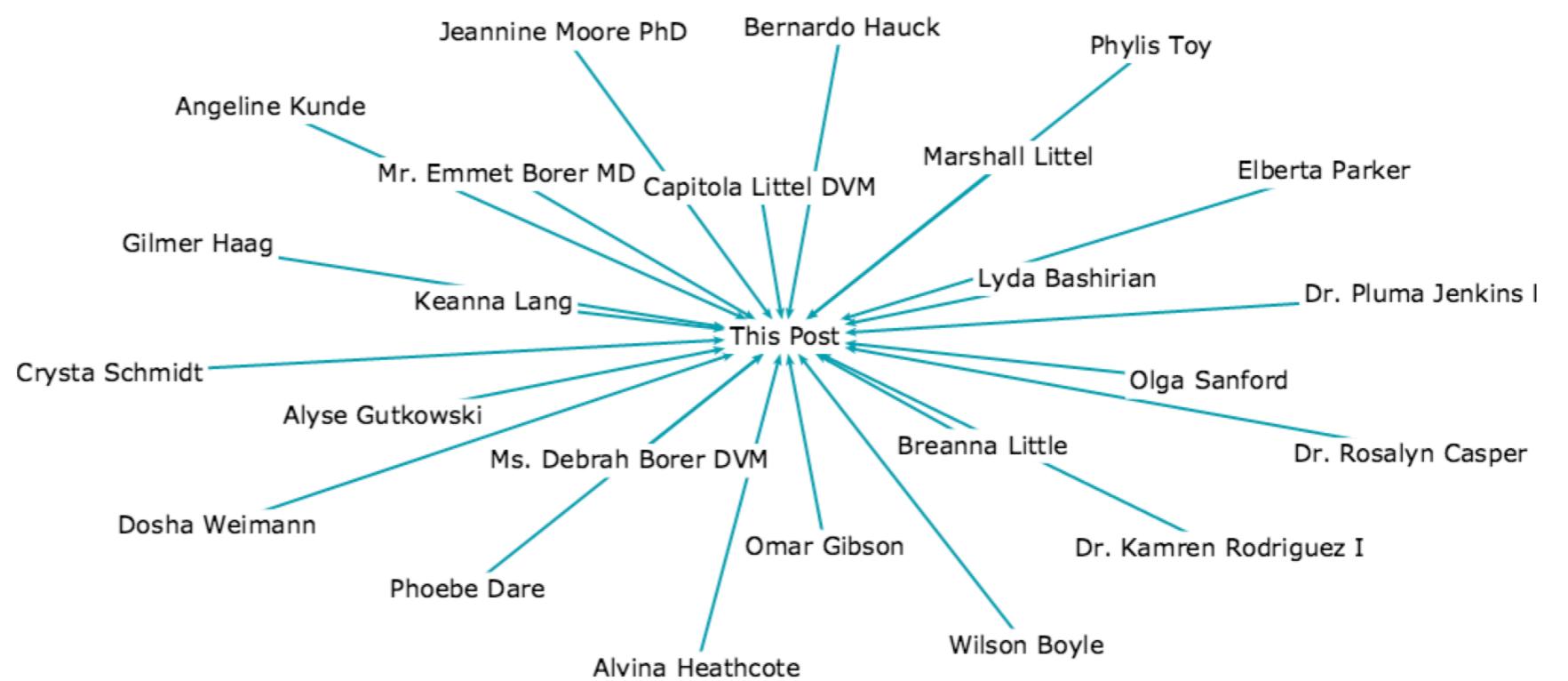
```
(:PERSON {Name:"Shelby Runolfsdottir",Username:"hglhrXiAAZUr",id:"124"})-[r699:FOLLOWS]->(:PERSON {Name:"Dillard Crooks II",Username:"nNpFYbIKMdmR",id:"660629"})  
(:PERSON {Name:"Dillard Crooks II",Username:"nNpFYbIKMdmR",id:"660629"})-[r151901000:LIKES]->(:POST {Name:"POPO",id:"2243331"})  
(:PERSON {Name:"Shara Kreiger PhD",Username:"bBOEMjSEYPSe",id:"1302097"})-[r151901043:LIKES]->(:POST {Name:"POPO",id:"2243331"})  
(:PERSON {Name:"Seneca Graham PhD",Username:"qxpaxTDtwfCe",id:"123"})-[r8719191:FOLLOWS]->(:PERSON {Name:"Shara Kreiger PhD",Username:"bBOEMjSEYPSe",id:"1302097"})
```

Your Posts

Post ID	Likes
170429	119
124417	97
1478014	92

Friend Recommendations

Post Name	Id
Addyson Bruen	cToJeFLUosYu
Berdie Barrows	VRBIldKnububQ
Blain Haag III	UEcPopzqEWIZ
Chester Hane	vobTfymEUapQ
Cortney Bruen	bCAkEdzddRFq
Denver Paucek	KirFddPXiLbQ
Devyn Kling	EfgsgFKJIBLk
Dr. Alize Stehr	UmGnQDyLcoEn
Dr. Brien Weissnat III	lynrOgghtBya
Dr. Deontae Renner V	CXMlbKnNVGjO



Liked by:

Name	Username
Marshall Littel	eGuGjMzpdnzD
Crysta Schmidt	RkiZloCKfsXI
Olga Sanford	SUICeLOdrtwm
Omar Gibson	xtJiRfowSMWT
Elberta Parker	SWtfrOBWECAG