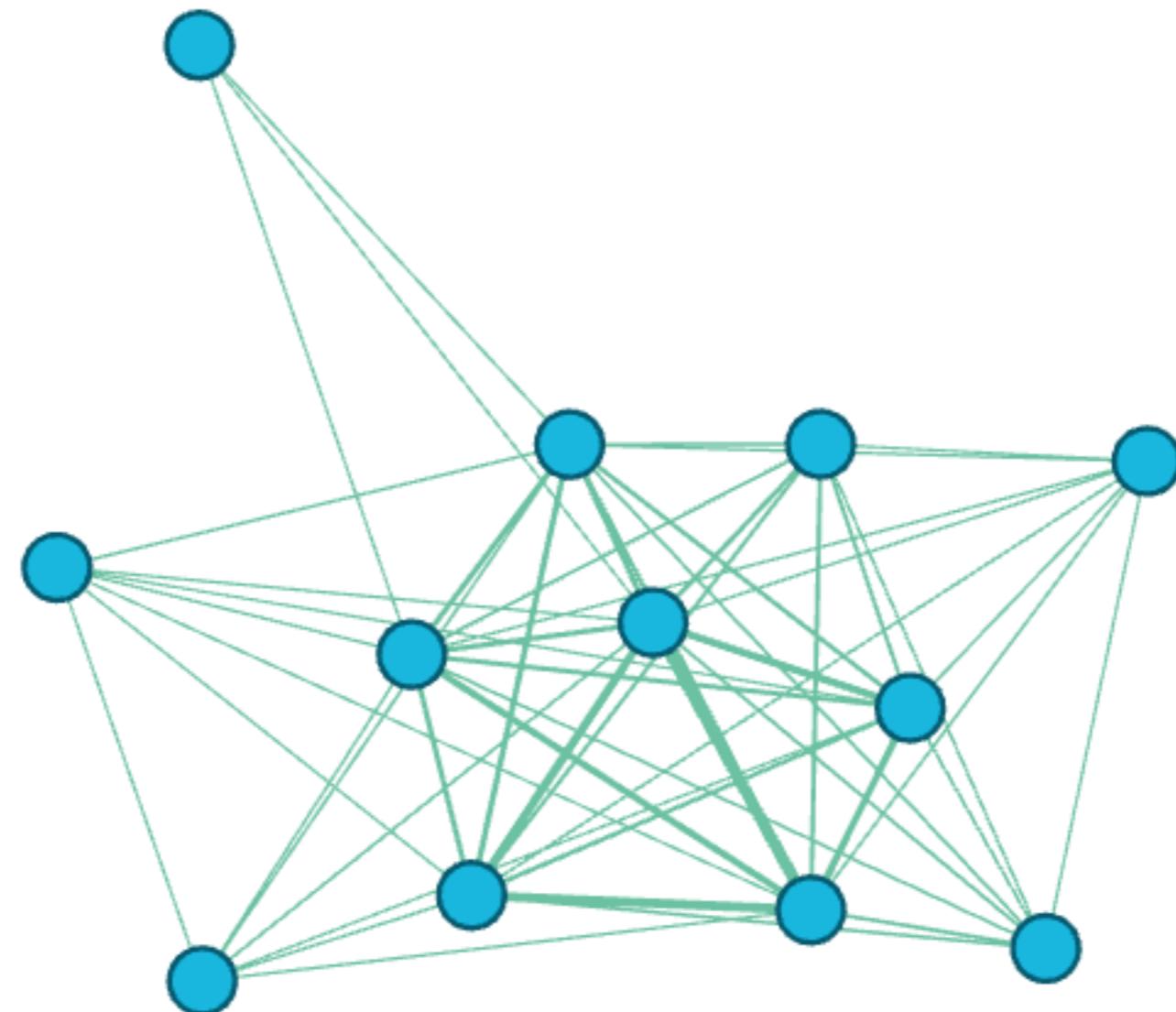


# Community Detection on Meetup.Com

*Filip Machi*  
*galvanize@fil.fmachi.net*  
*<https://github.com/nitecascade/solid-funicular>*

*A Social Network represents relationships or information flows between people, groups, organizations or other entities.*

*Often visualized as a Graph of Nodes and Edges.*



# Why Study Community In Social Networks?

- Social networks are not random, they have **structure**, like **community** (common interests among people)
- There are **surprises** waiting to be uncovered

# Where Did The Data Come From?

- *meetup.com API*
- *Python & bash*
- *5+ GB of JSON*
- *8200+ Groups*
- *7.3+ million Edges*

# Social Graph Construction

**Group: Poor Spellers of the World Untie**

**Members:**

Alice, Bob, Carla, Don, Ellen,  
Frank, Gerry

**Group: Lisdoxic Readers for the Blind**

**Members:**

Alice, Bart, Carla, Don,  
Frank, George, Hanna, Ira

**Group: Former Librarians**

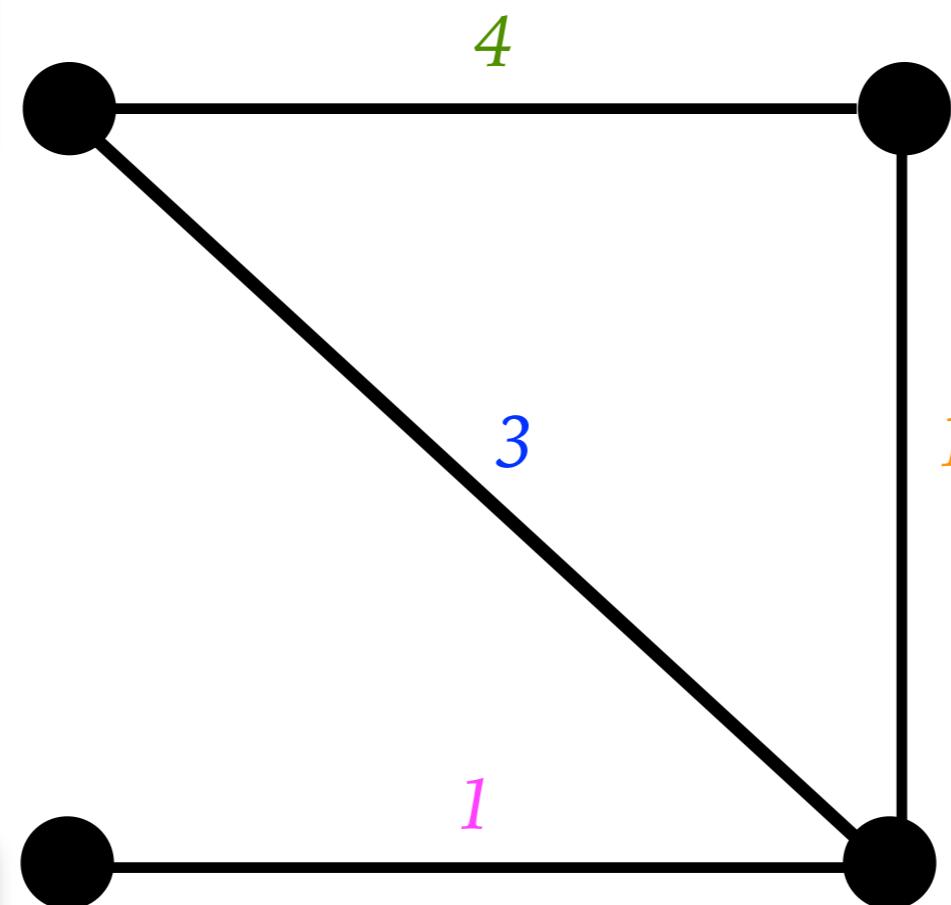
**Members:**

Fiona, Jack,  
Kim, Lou, Mary,  
Nick, Olga

**Group: Former Tattoo Artists**

**Members:**

Carla, Dan,  
Ellen, Fiona,  
Gerry



# Community Detection

**Group: Poor Spellers of the World Untie**

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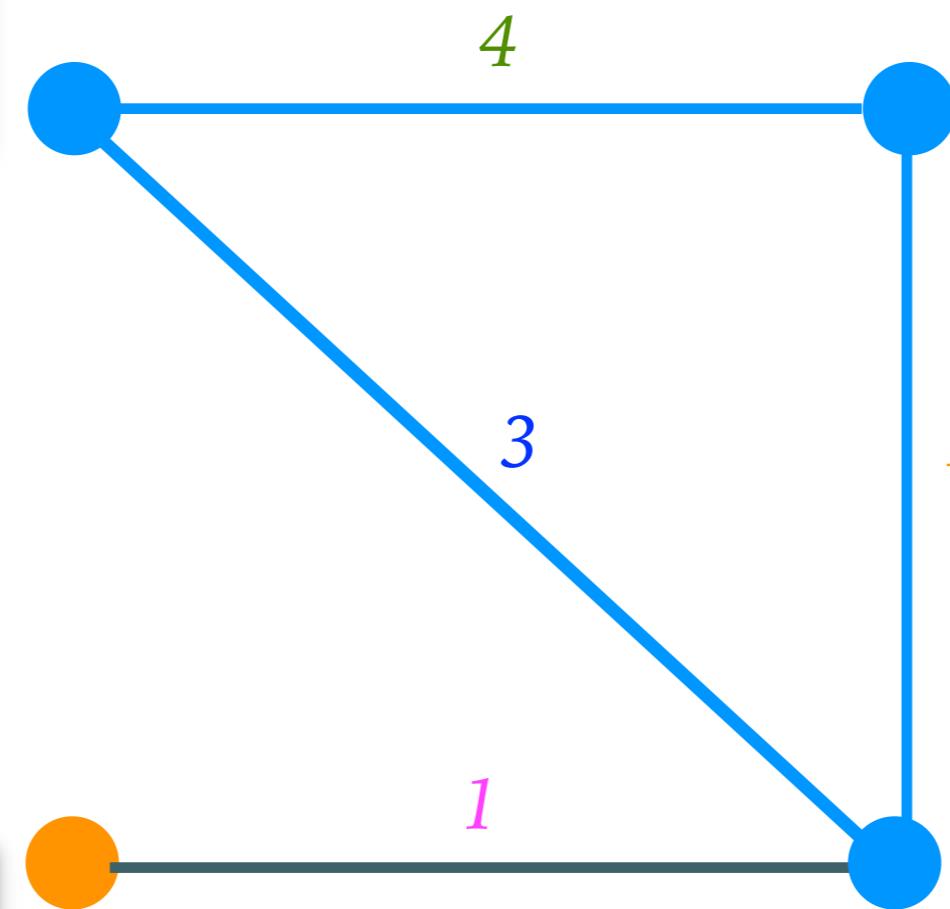
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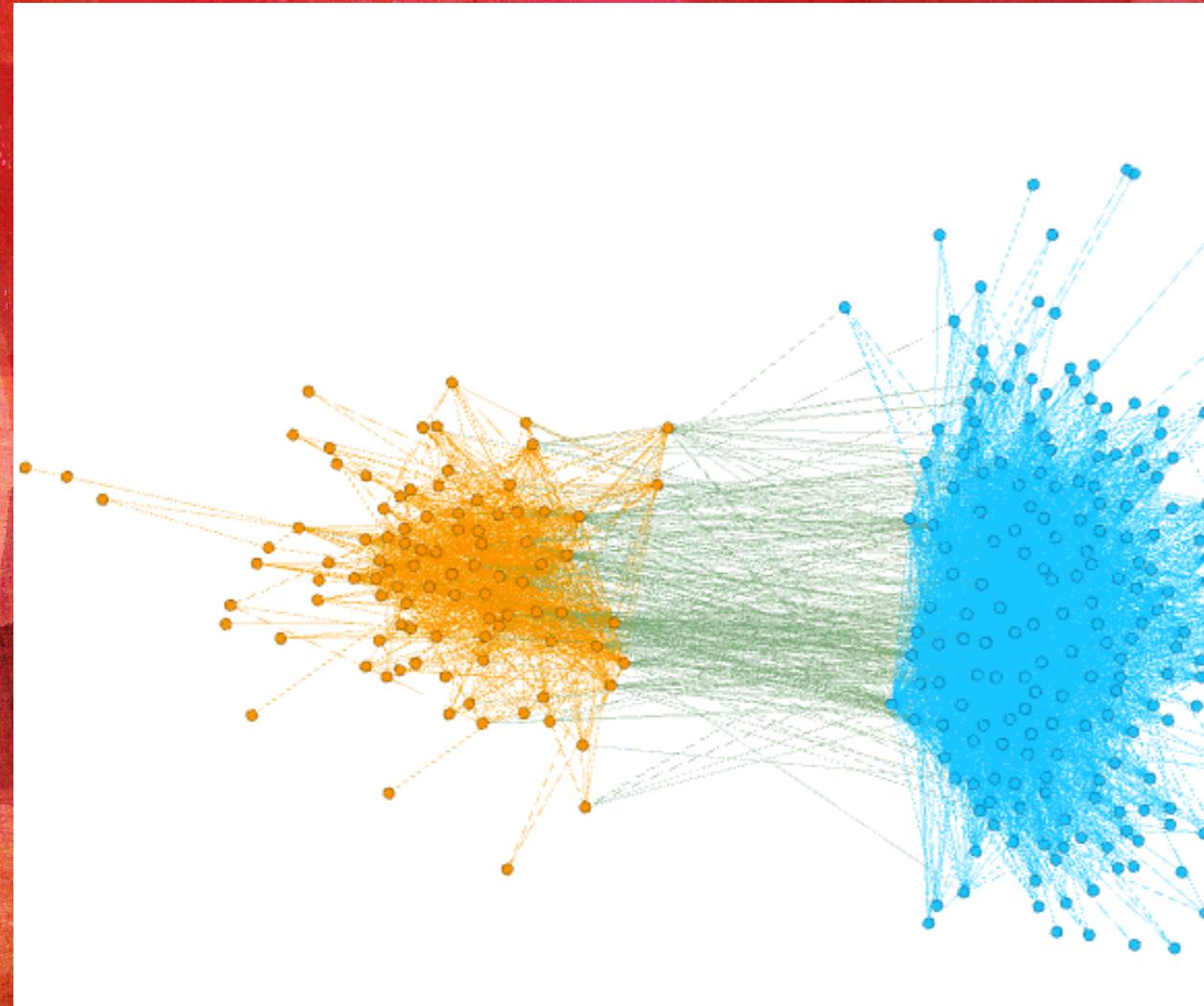
**Members:**

Carla, Dan,  
Ellen, Fiona,  
Gerry



# A Sample Community

(Meetup Group Names)



- Girl Gone International San Francisco
- SF Bocce
- 20 and 30 somethings in San Francisco - AWESOME Stuff
- San Francisco Women's Picnic Book Club--20s/30s
- San Francisco Newbies in their 20s
- Just Graduated College and Moved to Silicon Valley
- The Antisocialites: Unique people in their 20-30s
- New in town Girlfriends San Francisco
- Great Girlfriends SF (30-40)
- San Francisco Ladies' Brunch Meetup
- SF Girlfriends in 20's and 30s
- Just A Couple Couples In The City
- San Francisco 20-Somethings Women's Cookie Club
- San Francisco Young Professional Travelers
- San Francisco Random Adventurers 20s-30s
- Good times w/ Wine & Girlfriends 20s & 30s
- Going Out Girls in San Francisco! 20s-30s
- New In The City
- Marina Young Women's Cooking Club
- San Francisco DINKs: Fun Childfree Couples in 30s and 40s
- SF Movies, Happy Hours and Fun!

...

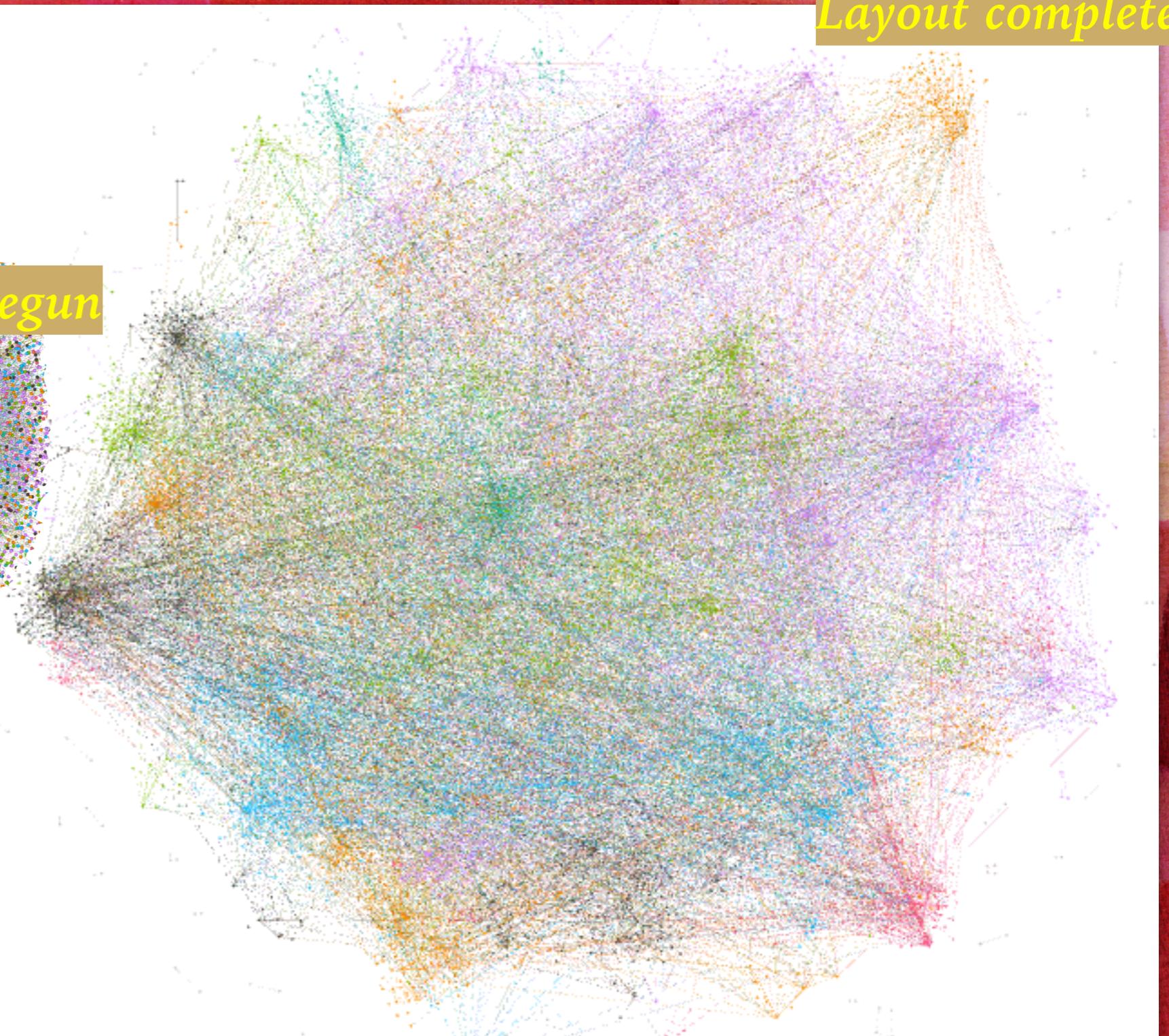
*Initial graph*

*Large Graphs are Difficult to Visualize*

*Communities*

*Layout begun*

*Layout complete*



# Community

(Meetup Group Names)

Marin County Euchre group (card game)

Never Too Late To Have a Happy Childhood even for grown ones

Tech in Marin

Marin Moonshiners Hike & Picnic

Sausalito 20-40's Sail Ski Social Meetup

Novato Cohousing Now Meetup

Marin Acoustic Guitar Group

Concord Wiki - All About Our City, Written by Our City

Got Wind and Water ...

Quest Hiking Group

Carl Jung and Active Imagination

Point Reyes Station Ukulele meetup - 2nd Sunday

The Graceful Power of The Consciousness

Marin Meditation and Conversation Meetup

North Bay Mobile Drive-In

Kayakers' Alliance

The Borg

Hotspot 2.0 (SF Bay Area)

Sports Hackathon

Crowdfunding Valley

The Business of Coworking

Hello World! SF

Khan Academy (Unofficial) Study Group

Elevator Pitch Practice -Record Your  
Presentation, Brush up

Friends of Canadian Wilderness Meetup

An Alternative to Dating as Usual  
Decriminalize Prostitution!

OneTaste East Bay

Real Pleasure Marin

Cougar Parties & Cruises

Date Me, If You Dare

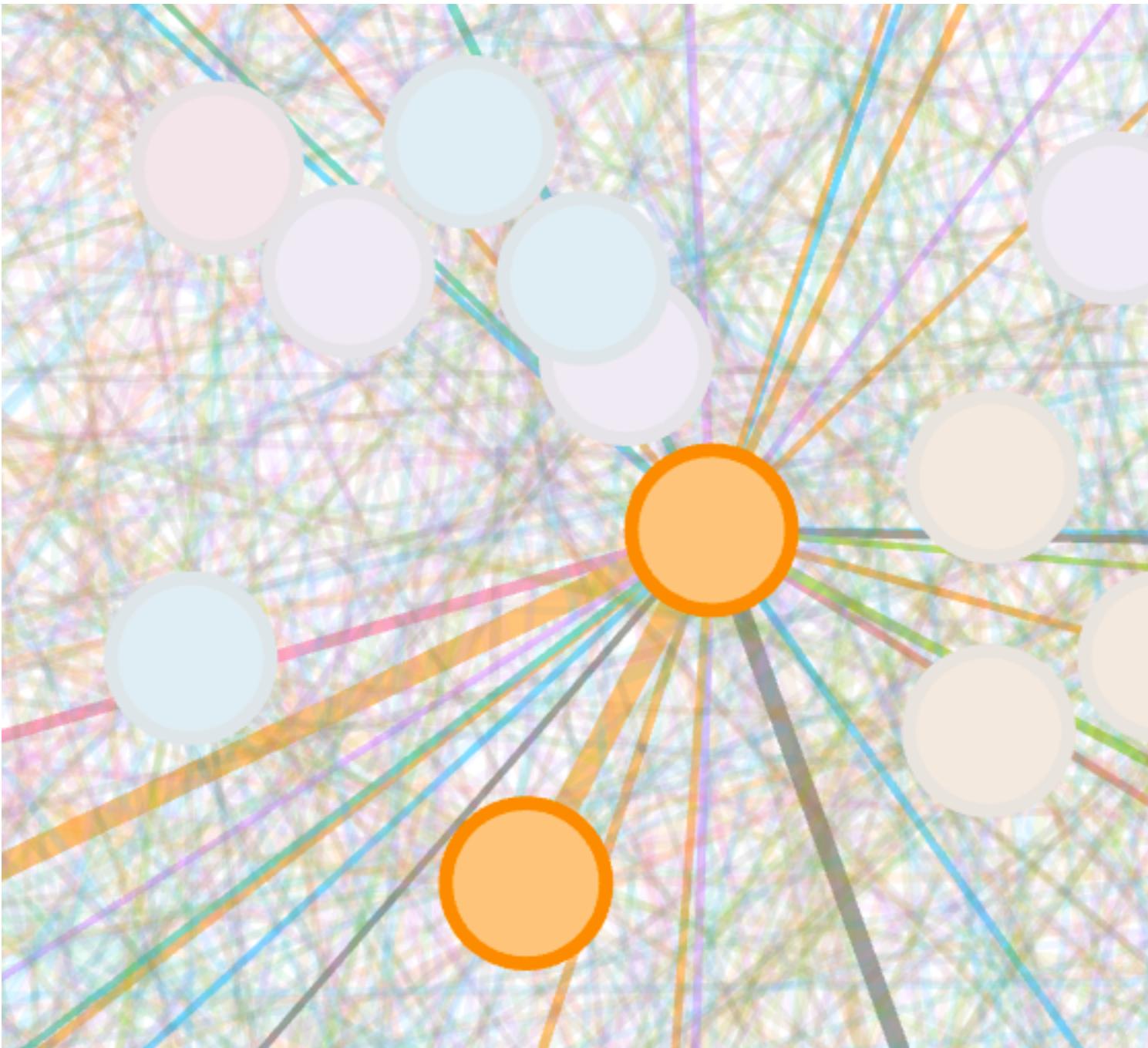
Tantra with Moneeka

Sequoians Nudist Park, Castro Valley Ca.

Get a sense of where your neighbors are going

# Future Directions

- *App to browse Meetup groups*
- *Jumpstart a Meetup Recommender*
- *Sniff out the social heartbeats of an area*
- *Stretch yourself in ways you would not have imagined*



# Questions?

Filip Machi  
[galvanize@fil.fmachi.net](mailto:galvanize@fil.fmachi.net)  
<https://github.com/nitecascade/solid-funicular>

## Community

(Meetup Group Names)

- Crowd-tasting: Whisky and other spirits [SF]
- Happy Hour Club
- New York Giants Fans Unite in San Fran
- The San Francisco Live Indie Music Group
- Mission Dive Bars
- The NY Yankees Unite in SF
- Women who like Beer
- Chicago Sports Fans in the Bay Area
- San Francisco Chicago Bears Fans -Bear Down!!
- Bay area Hockey fans!
- San Francisco Homebrewers Guild
- San Francisco Fighting Illini Sports Fans
- San Francisco Notre Dame Football Meetup
- Sirwisa Brewing Collective
- San Francisco Scotch and Whisk(e)y Meetup
- SF Bourbon
- Alcohol Alchemy - Learn. Make. Share.
- Rose Kingz Mens Basketball Tournament
- SF Young Professional Canadian Expats
- Bay Area Beer Socials