

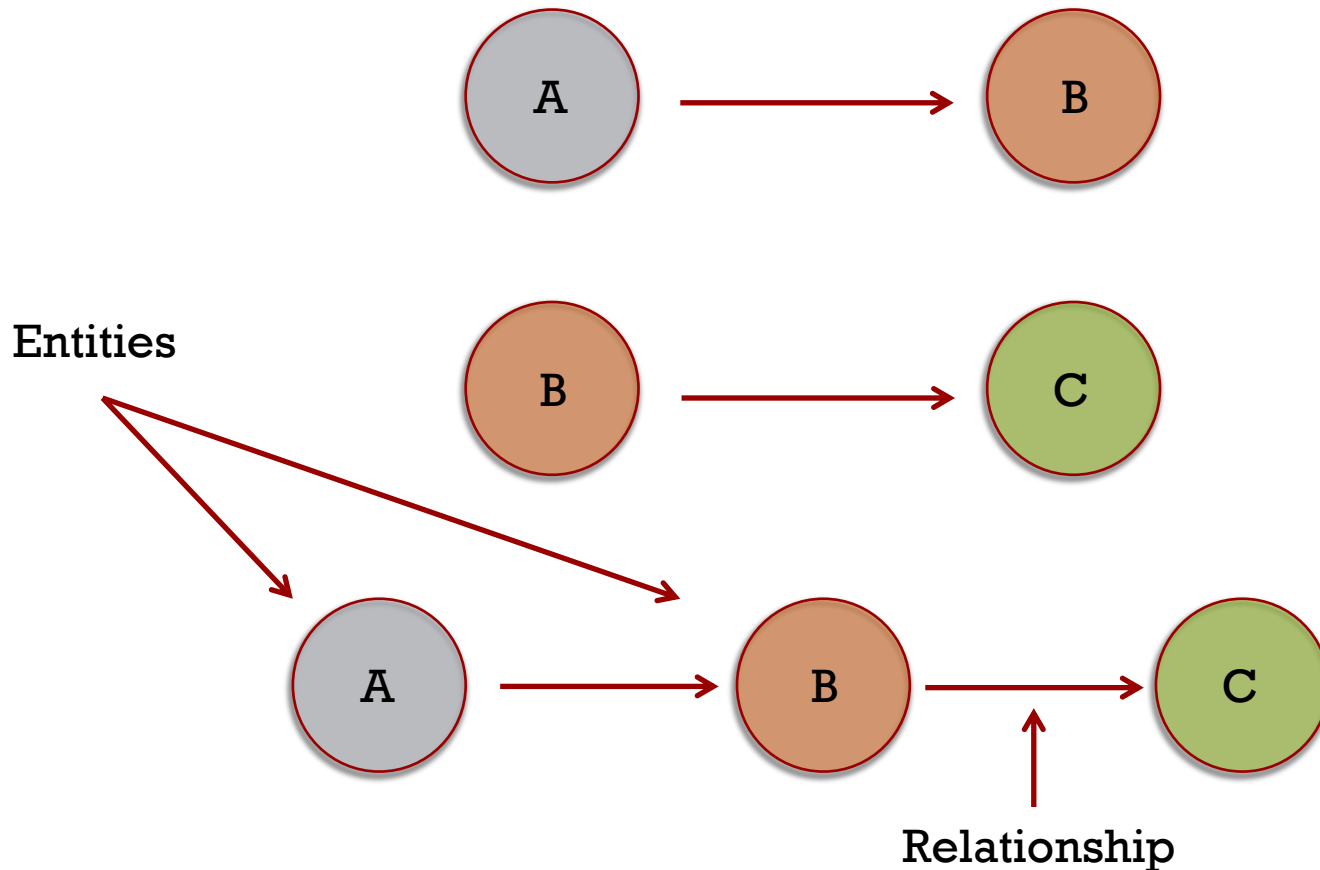


STRIDER Project

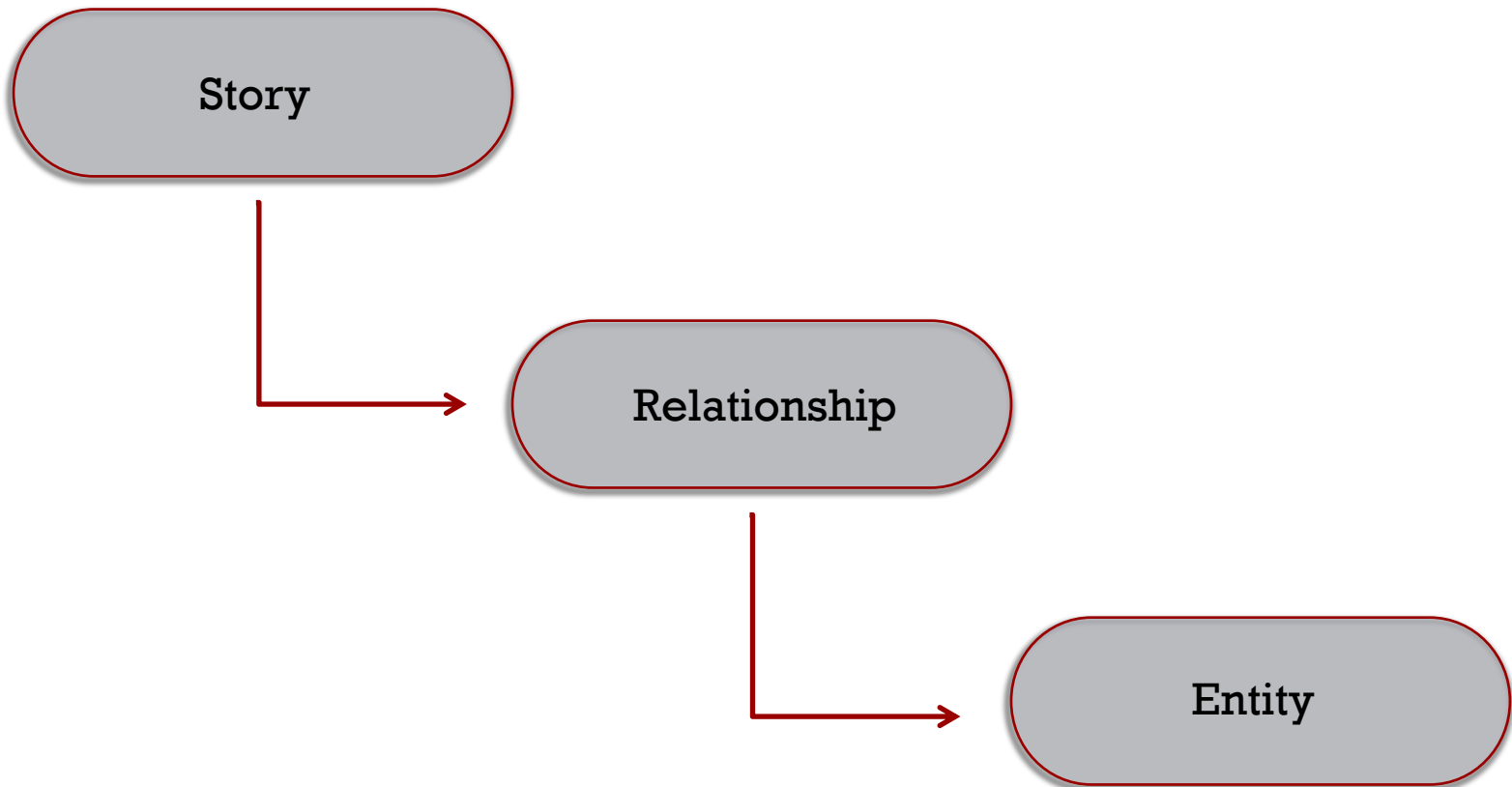
Sweta Karlekar, 7/27/15-8/21/15

Thomas Jefferson High School Senior

STRIDER Storytelling



Story Hierarchy



Person: ABC

• Tags:

• ERDC

• Intern

• ROTC

Person: BCD

• Tags:

• ERDC

• Army

➤ Implementing subclasses:

➤ Person

➤ Organization

➤ Location

➤ Item

➤ ArrayList<String> Tags

➤ Comparison:

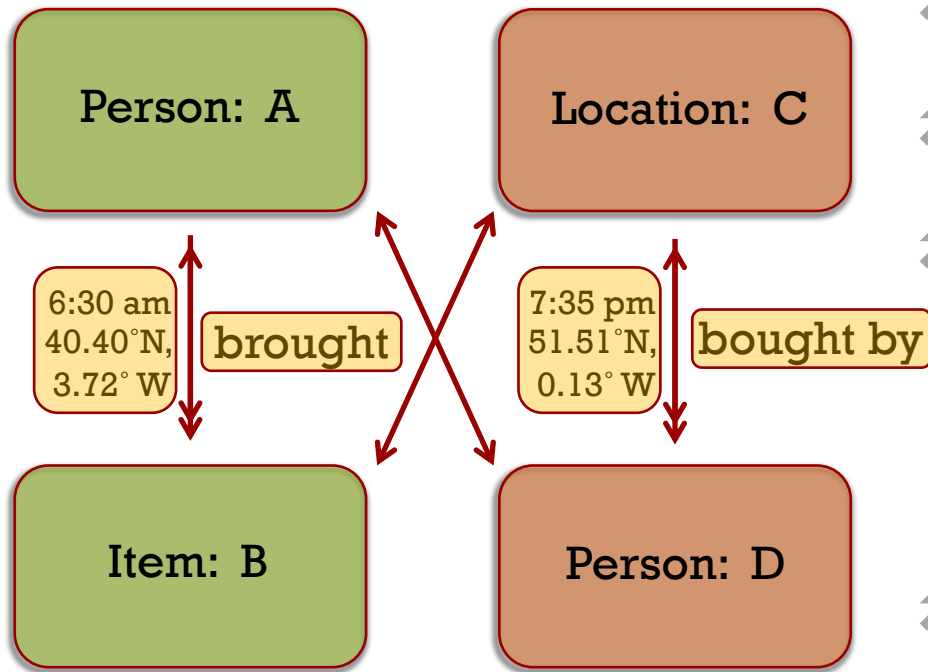
➤ Levenshtein distance

➤ Tag similarities

Entity

Abstract Class

-compareTo(Entity e)

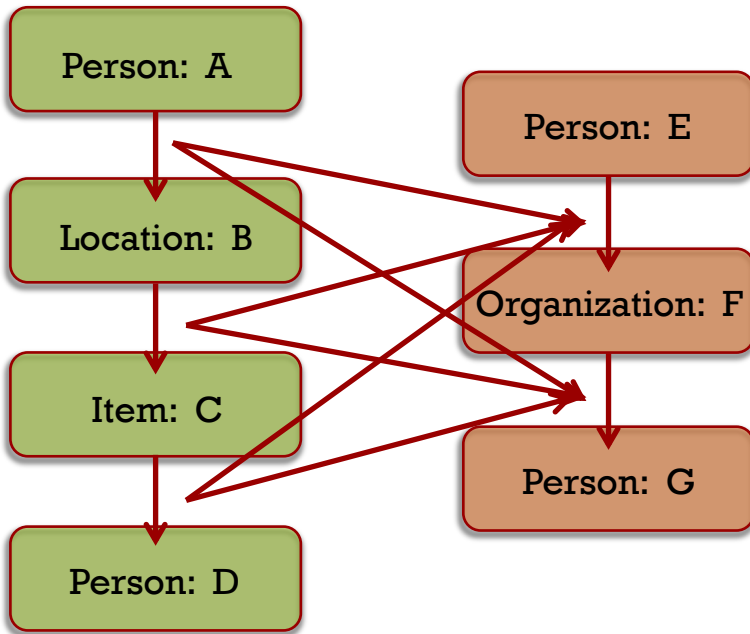


- Knows Entities
- Stores location and time
- Comparison:
 - Entity comparison
 - Levenshtein distance
 - Spatiotemporal distance
- Weighted comparison:
 - Experimentally found
 - Dependent on data size

Relationship

Concrete Class

- compareTo(Entity e)
- Temporal location
- Spatial location



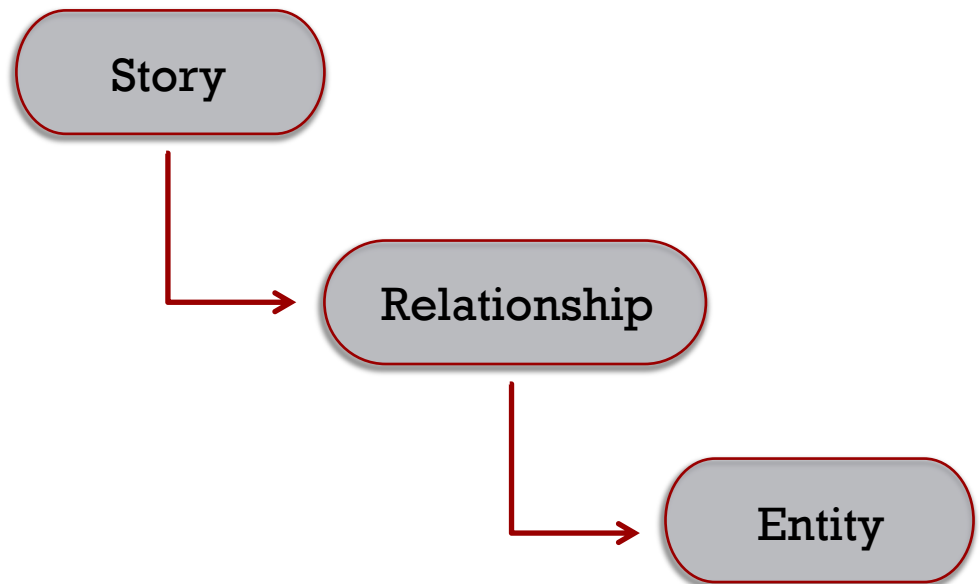
Story

Concrete Class

- compareTo(Entity e)
- Temporal location
- Spatial location

➤ Comparison:

- Relationship comparison
- Nested for-loop



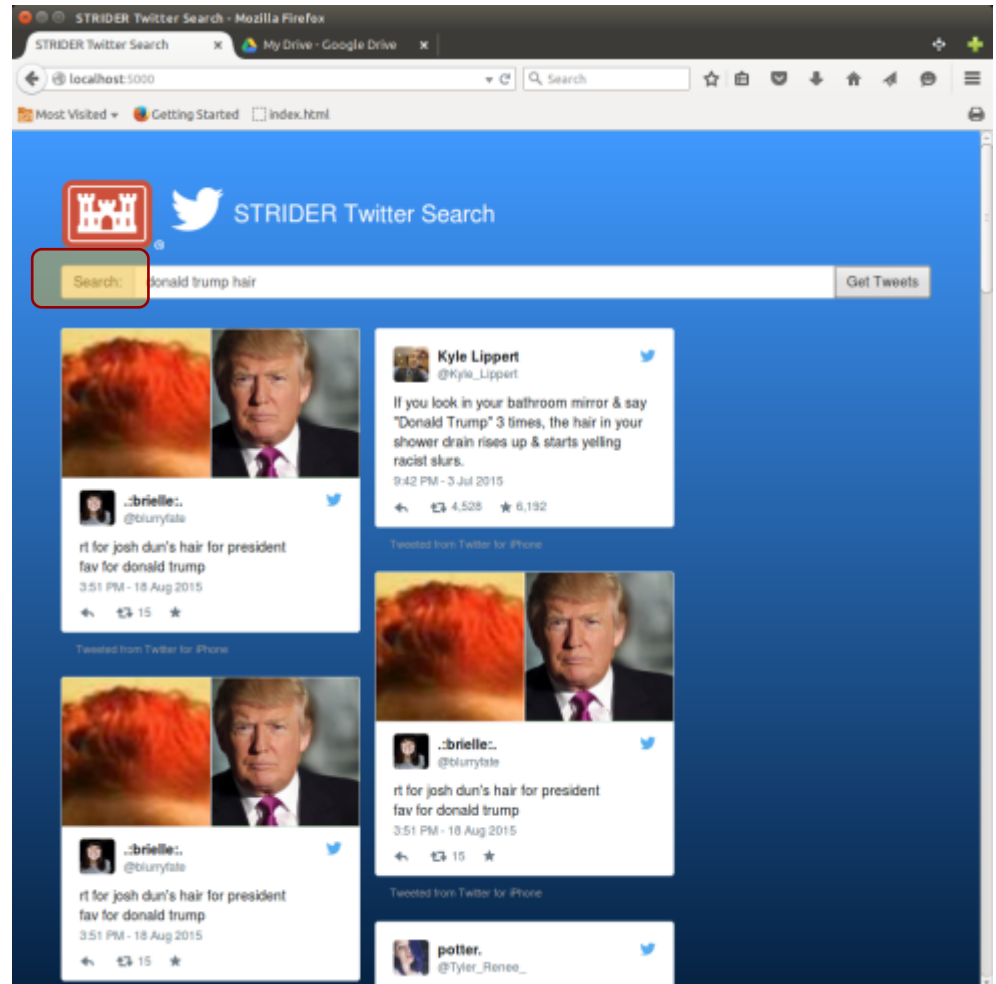
STRIDER Data Collection

- Natural Language Processor (NLP):
 - Twitter statuses
 - News articles
 - Word documents (i.e. Army logs)



Twitter Demo

Search Bar





Twitter Demo

STRIDER Twitter Search - Mozilla Firefox

STRIDER Twitter Search x My Drive - Google Drive x

localhost:5000 Search

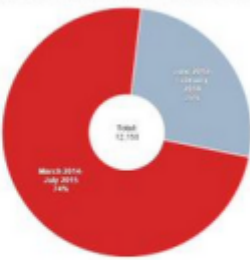
Most Visited Getting Started index.html

  STRIDER Twitter Search

Search: ISIS Get Tweets

Tweeted from Twitter for iPhone


Total Victims Of Barrel Bomb Attacks
Breakdown of barrel bomb attacks in Syria before and after UN resolution 2118 passed in February 2014




Period	Percentage
March 2014 - July 2015	44%
July 2015 - July 2016	56%

Total: 12,108

Source: [Syrian Documenters Center](#) & [Syria Civilian Data](#)


 **SAMS**
@sams_usa


#Barrelbombs from #Syria'n gov't kill more civilians than #ISIS & #AlQaeda combined. @IBTimes bit.ly/1IZFQwg

 **LS González**
@lsanzo

Interesante análisis: financiación del ISIS vía distribución del petróleo que controla y conexiones pro-occidentales medium.com/insurge-intell...

3:53 PM - 18 Aug 2015

 Medium



Britain's secret ties to governments, firms

Twitter Demo

STRIDER Twitter Search

localhost:5000

STRIDER Twitter Search

Search: twitter developers

Get Tweets

Intermediate/Advanced Application Developers (15-00755) - New York- NY
looking to bring on a Mid-Level Application Developer to support client initiatives within the Financial Services Industry to be based...
New York City, NY

#job

Joblore NY
@JobloreNY

#Apply for Intermediate/Advanced Application Developers (15-00755) - New York- NY #NY here jobviewtrack.com/en-us/job-4919...

1:32 AM - 19 Aug 2015

Tweeted from Joblore NY

World News
@WorldNews2016

Clash of Clans - harvested five million dollars a day to developers - adil123.com/clash-clans-ha...

1:31 AM - 19 Aug 2015

Tweeted from adil123

Microsoft Developer
@msdev

Which session are you most excited for?
#DevTalk

A Dev's Guide to #Windows10 Build 10240, 8/12-13 on @ch9: msft.it/6010B1vUk

12:55 PM - 11 Aug 2015

Microsoft Channel 9 @ch9

57 minutes, 5 seconds

Tweeted from Twitter for iPad

Build great apps with Windows 10

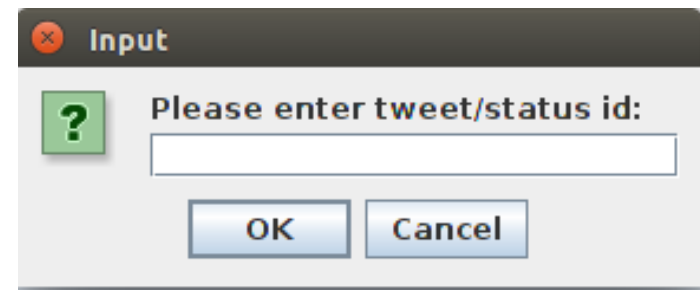
Microsoft

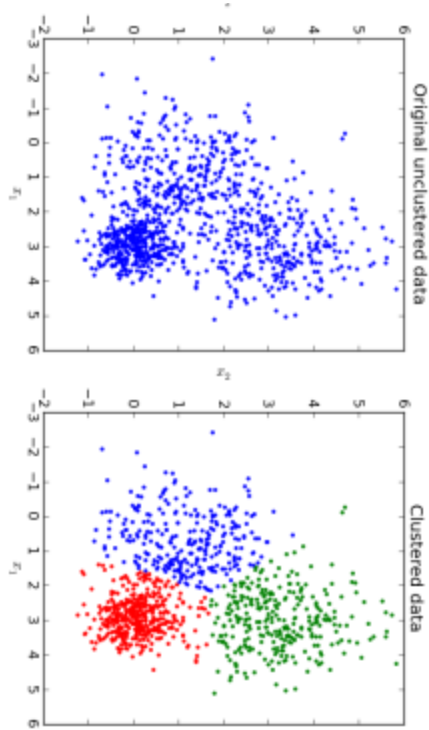
Microsoft Indonesia
@MicrosoftID

intel

STRIDER Retweeter Search

- SignUpPost for API Call Authentication
- Twitter REST API
 - GET status/retweeters
- Output .csv file with user information





- Used in STRIDER project
- Represent objects as data points
- One of the most common clustering algorithms
- Python 3.0

K-Means Clustering

-Clustering algorithm



- Set up my first server: Apache LAMP
- Ran programs on Node JS server
 - Lightweight server
 - Local host

Servers

- Apache LAMP
- Node JS



➤ Wrote my first C++ program

➤ Learnt about:

- User inputs (*cin*)
- User outputs (*cout*)
- Memory allocation
- Memory deletion

C++

-Low level language



ANGULARJS

- Wrote my first web application in AngularJS
- TwitterWall search demo

AngularJS

- Built on top of Javascript
- Extremely powerful

Future

- Continue working with C++ & AngularJS
- Learn more web development
 - Bootstrap
 - Mobile AngularJS
 - CSS