



# Community Detection for University Badges

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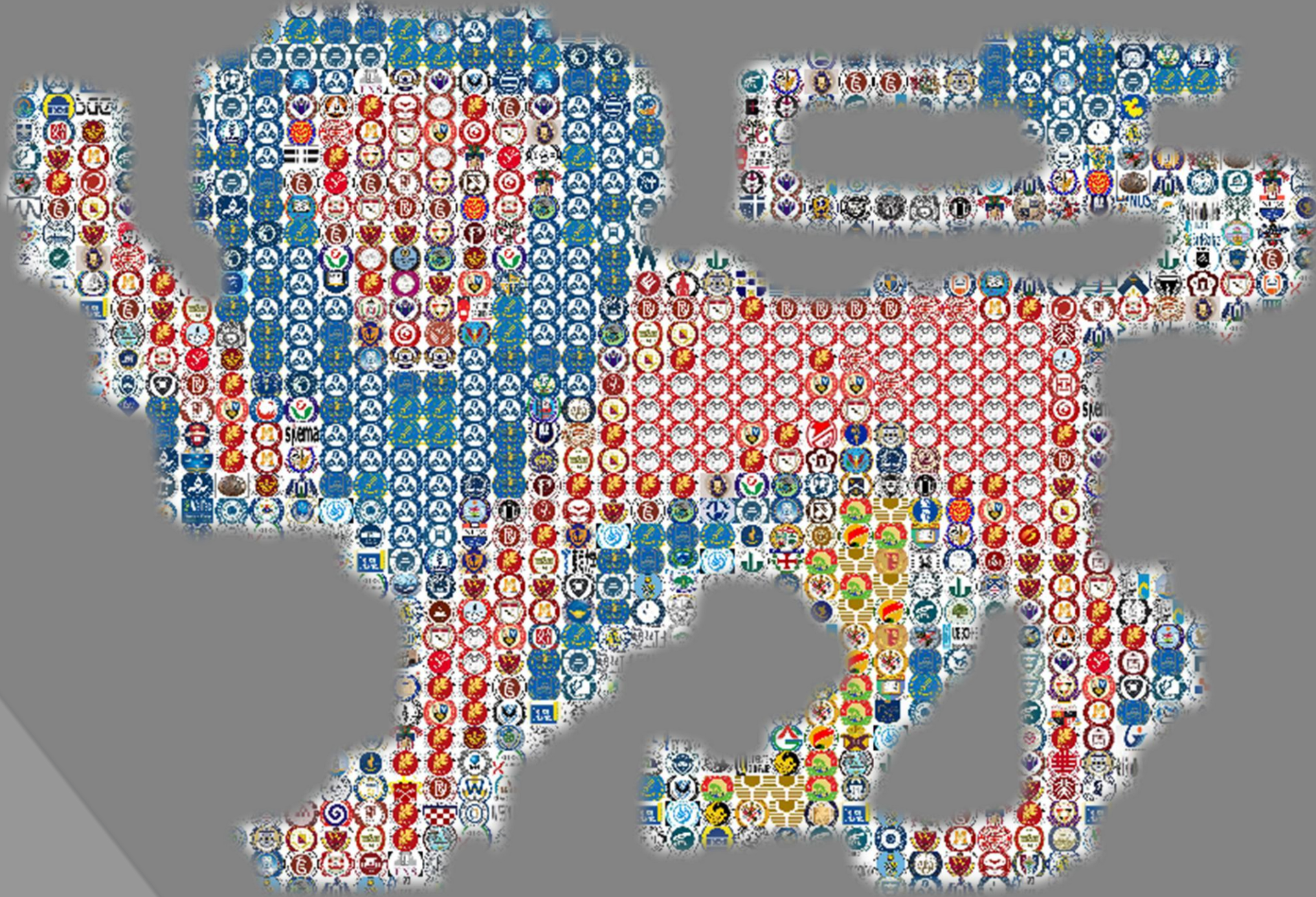
Team  
01

SWS3001  
Summer 2019

## FIND YOUR TWIN-UNIVERSITY

### INTRODUCTION

TOPIC: CD for university badges  
OBJECT:  
MOTIVATION: many badges look alike  
PURPOSE: analysis the similarity and dissimilarity of university badges over different countries and within each country



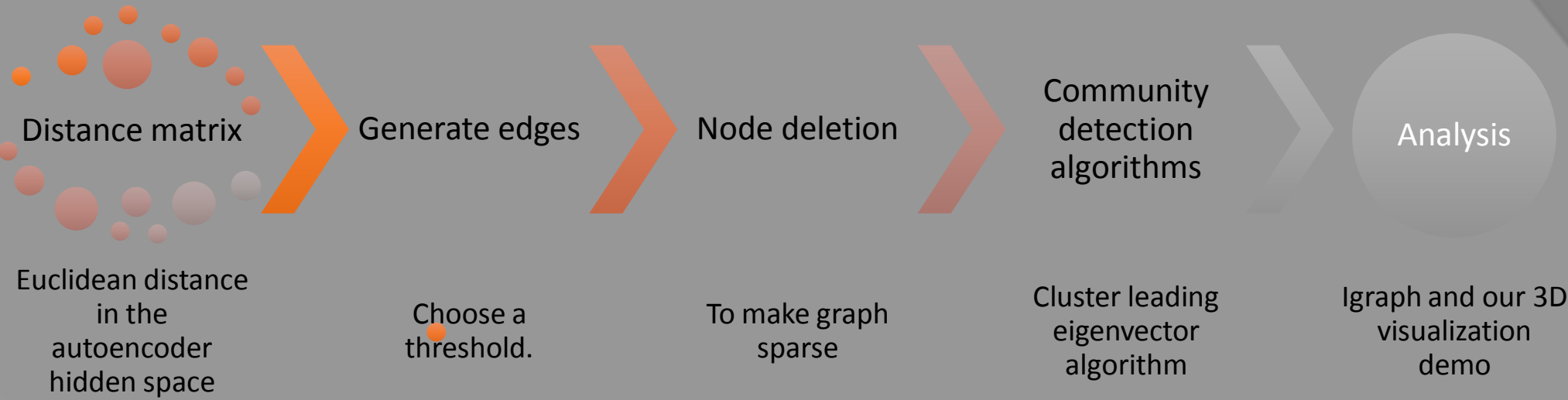
### DATASET & METHOD

DATASET  
4000+ badges from 12 countries

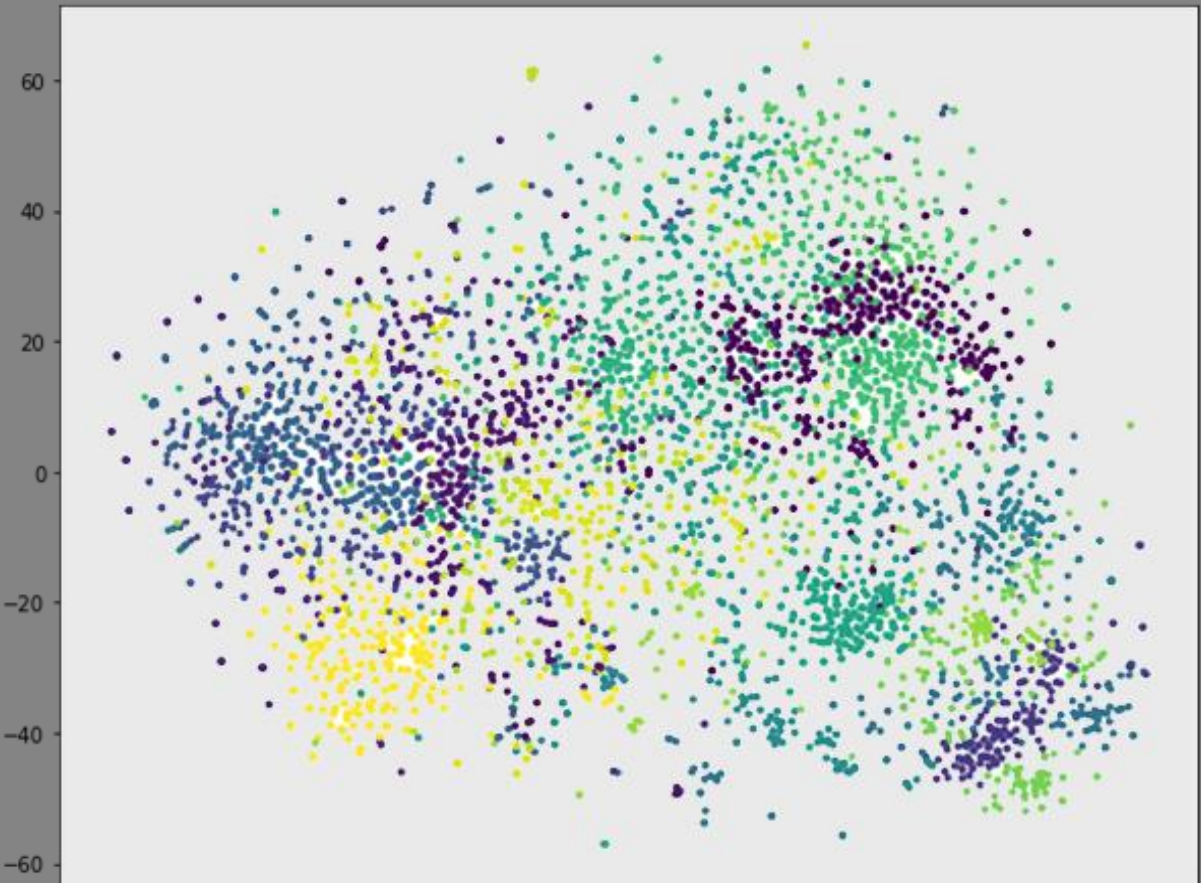
METHOD  
**AUTOENCODER** to extract features  
**MATRIC** of distance computed  
perform **Girvan-Newman**



### WORKFLOW

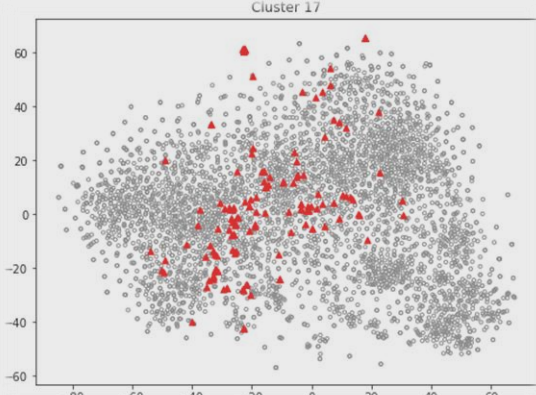


### Clustering Result



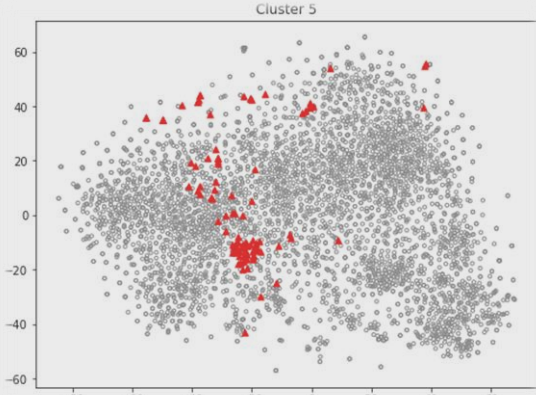
### RESULTS OBTAINED

Badges contains the same icon tends to be clustered together.  
All the medical school has a icon of snap twisted on a cane.  
Also, we find that the nodes connects green community (medical schools) and orange community are the medical schools that its icon is reshaped from the original snake cane.



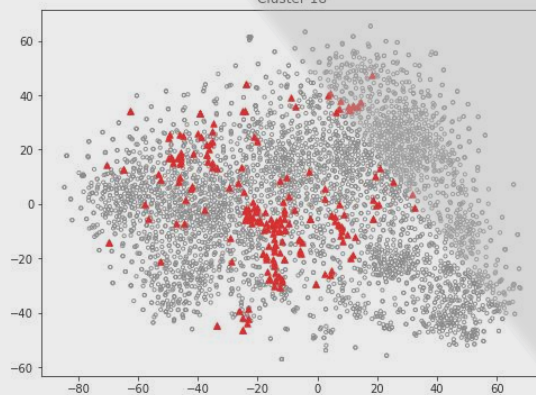
Japan : 13%

Just the character: university



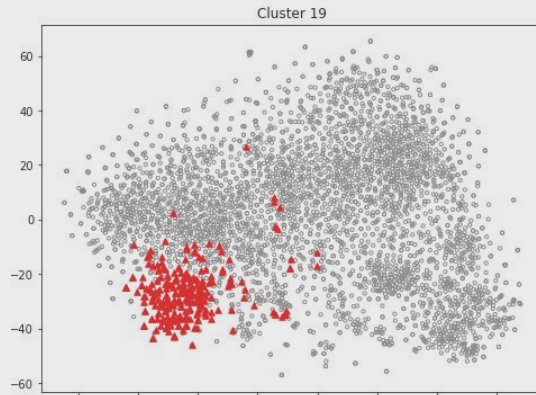
UK : 17%

Shield and a hat



Germany : 53%

Kin, Queen, Goddess



Indian : 24%

Rising Sun from sea and ocar

