# Ethnicity prediction

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Can we predict ethnicity of twitter users using popular twitter accounts?

### Method

In this project we use popular twitter accounts (politicians, movie stars, sports stars) to predict ethnicity of twitter users

- Step 1: Get the most popular twitter accounts which people belong to same ethnicity follows
- Step 2: Label the followers with that ethnicity
- Step 3: Get friends of the followers
- Step 4: Construct a Boolean matrix with users and accounts they follow
- Step 5: find classification boundaries and make predictions

	Acct 1	Acct 2	Acct 3	Acct 4	Acct 5	Acct 6	Acct 7	Class
User 1	1	1	1	0	1	0	0	C1
User 2	1	1	0	0	0	0	0	C1
User 3	1	1	0	0	1	1	0	C1
User 4	1	0	0	0	0	0	1	C1
User 5	1	1	1	0	0	0	0	C1
User 6	0	1	0	1	1	1	0	C2
User 7	0	0	1	1	0	1	0	C2
User 8	0	0	0	1	1	1	1	C2
User 9	0	0	1	1	1	1	0	C2
User 10	0	0	0	1	1	0	0	C2

# Data

Twitter

5000 followers \* 12 brands \* 5000 friends = 60000 requests =

41 days / 10 twitter accounts = **4.1 days** 

# Related work

<u>Understanding the Demographics of Twitter Users</u>.

In this US census data has been used to predict the ethnicity. They have used names of twitter account to predict the ethnicity.

# **Bias Correction**

Not everyone loves politics.

We must choose popular twitter accounts carefully, to avoid bias to particular set of population.

## **Timeline**

October 22: Proposal Presentation

October 29: Data collection

November 5: Method implementation

November 12: Analysis of results November 19: Enhancing results

November 26: Conclusions and reviews

December 3: Presentation

# **Future work** Using hash tags with combination of popular twitter accounts and make our predictions more accurate

