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NEW YORK UNIVERSITY

CUSP 2016 Hack Day

2016 U.S. ELECTION OUTCOME

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Content

Why do we care?

Our Approach

- A Word on Data
- Methodology

Analysis

Further Research

The outcome of the 2016 US presidential election was FAR off from the predictions.

Why did this happen? What did the analysts get wrong?

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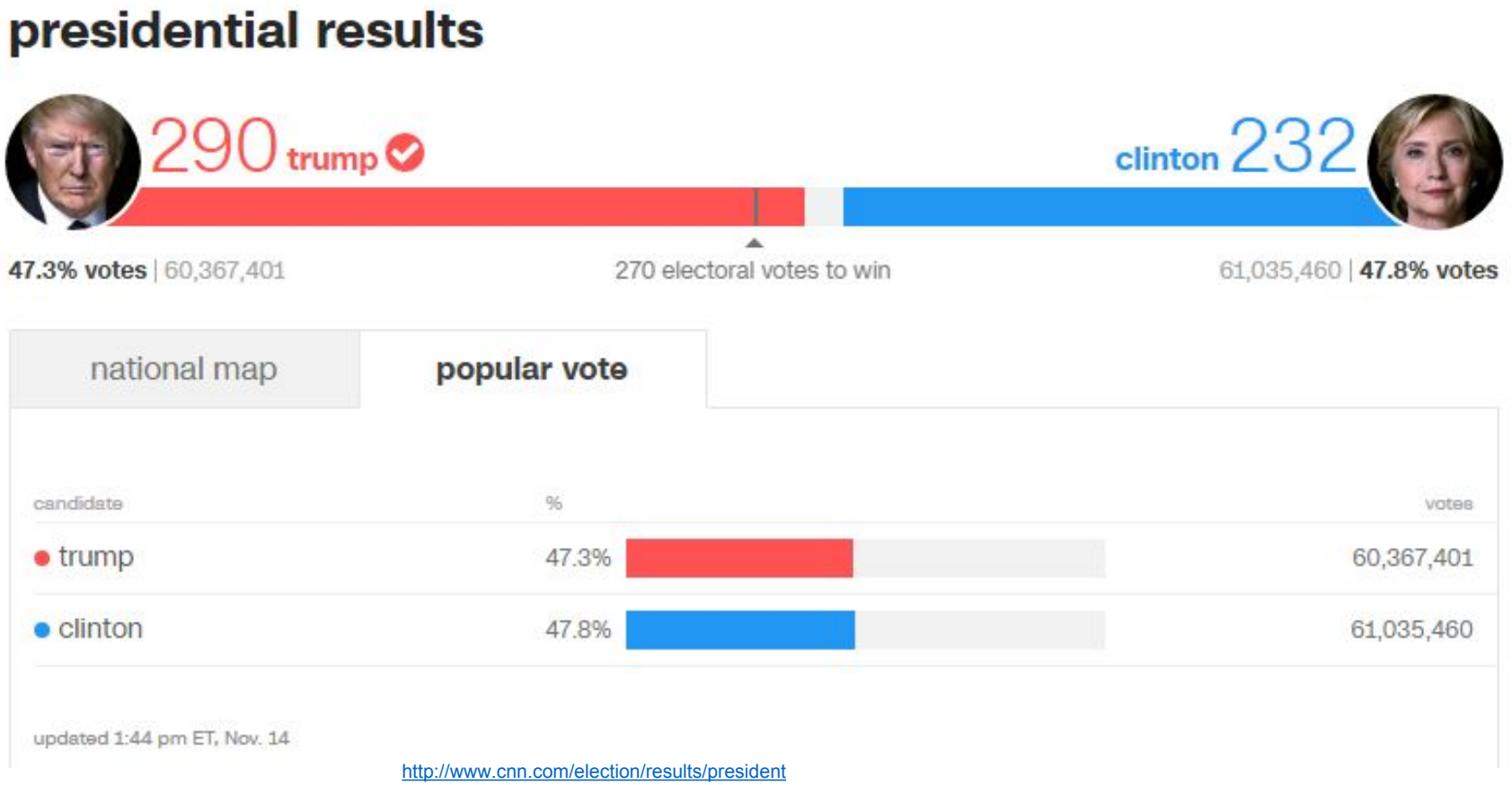
2016 election results

How influential were certain factors in explaining the Election outcome?



http://www.cnn.com/election/results/president

- Education?
- Racial Diversity?
- Income?
- Urbanization?
- Foreign born?

A Word on Data

Sources

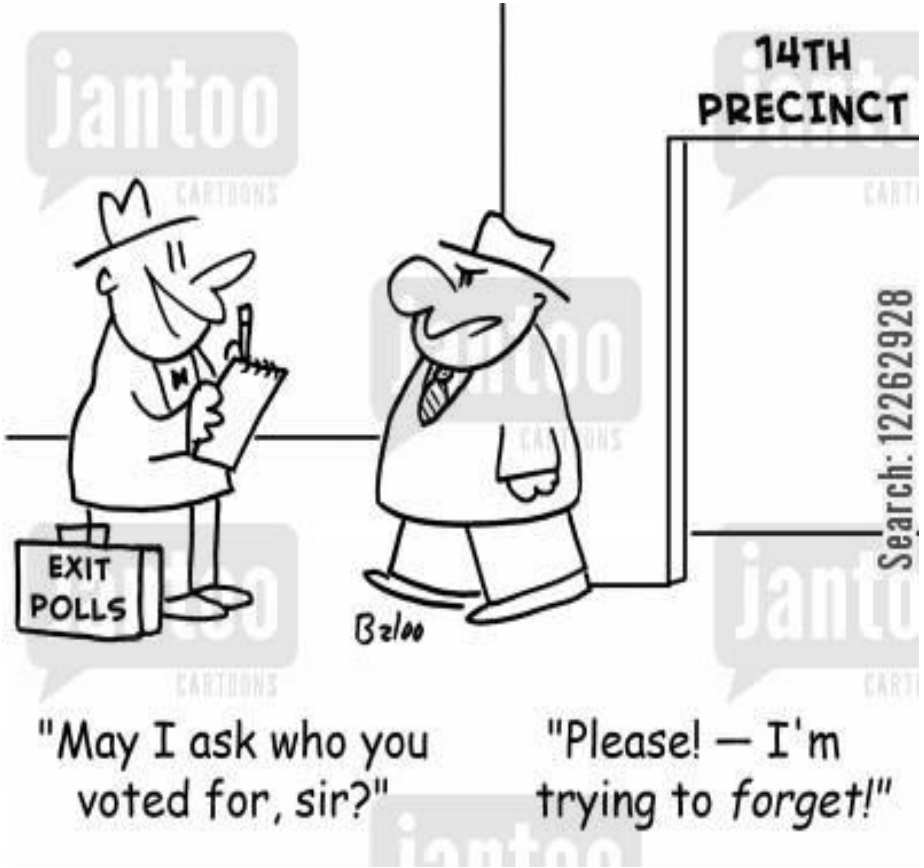
- Exit Poll Results for 37 U.S. States (NYT)
- U.S. Census
- ESRI

Data Limitations

- Not all 50 states represented
- New England States lacks results by county (only township)
- Not all votes calculated as of pull (11/13/2016)

Bias

- Exit polls not an accurate representation of actual voting patterns



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Methodology

Breakdown:

Data Wrangling
Merged exit poll data with census data

Regression Analysis
Regressed five explanatory variables against % votes for Trump

Visualization
Maps of the exit poll results across the U.S.

OLS Regression Results

Dep. Variable:	trumpp	R-squared:	0.079
Model:	OLS	Adj. R-squared:	0.078
Method:	Least Squares	F-statistic:	45.37
Date:	Sat, 19 Nov 2016	Prob (F-statistic):	4.57e-45
Time:	16:36:33	Log-Likelihood:	716.66
No. Observations:	2640	AIC:	-1421.
Df Residuals:	2634	BIC:	-1386.
Df Model:	5		
Covariance Type:	nonrobust		

	coef	std err	t	P>|t|	[95.0% Conf.	Int.]
Intercept	0.6853	0.006	115.706	0.000	0.674	0.697
SBachelor_norm	-0.0292	0.013	-2.332	0.020	-0.054	-0.005
SIncome_norm	0.0026	0.016	0.163	0.870	-0.029	0.034
SRacialDiversity_norm	-0.0516	0.005	-10.476	0.000	-0.061	-0.042
SForeign_norm	0.0241	0.003	7.365	0.000	0.018	0.030
TDensity_norm	0.0088	0.002	4.620	0.000	0.005	0.012

Omnibus:	296.961	Durbin-Watson:	0.946
Prob(Omnibus):	0.000	Jarque-Bera (JB):	406.015
Skew:	-0.958	Prob(JB):	6.84e-89
Kurtosis:	3.137	Cond. No.	33.5

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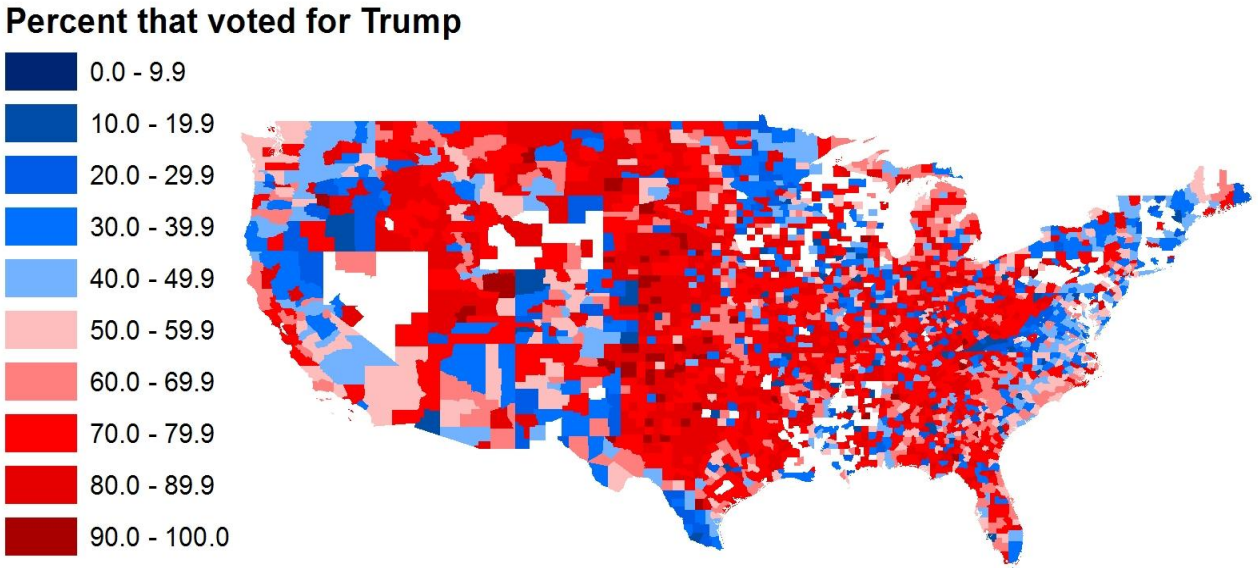
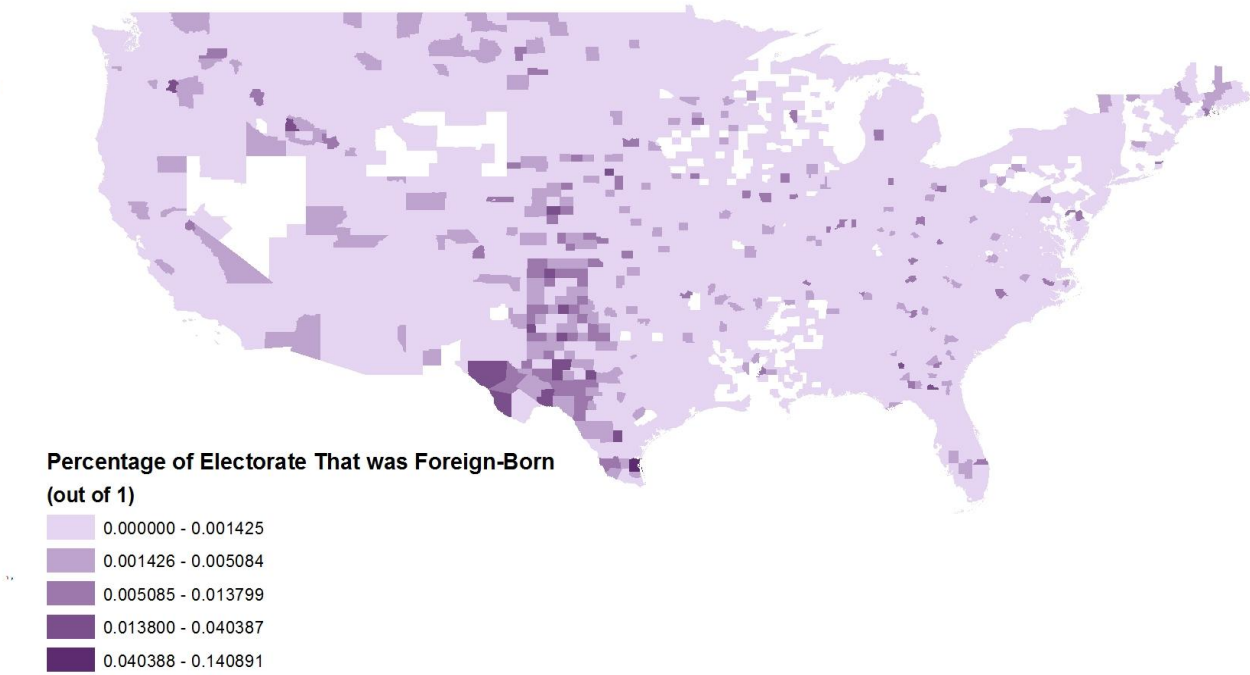
ANALYSIS: Compare Election Results with Foreign-Born Voters





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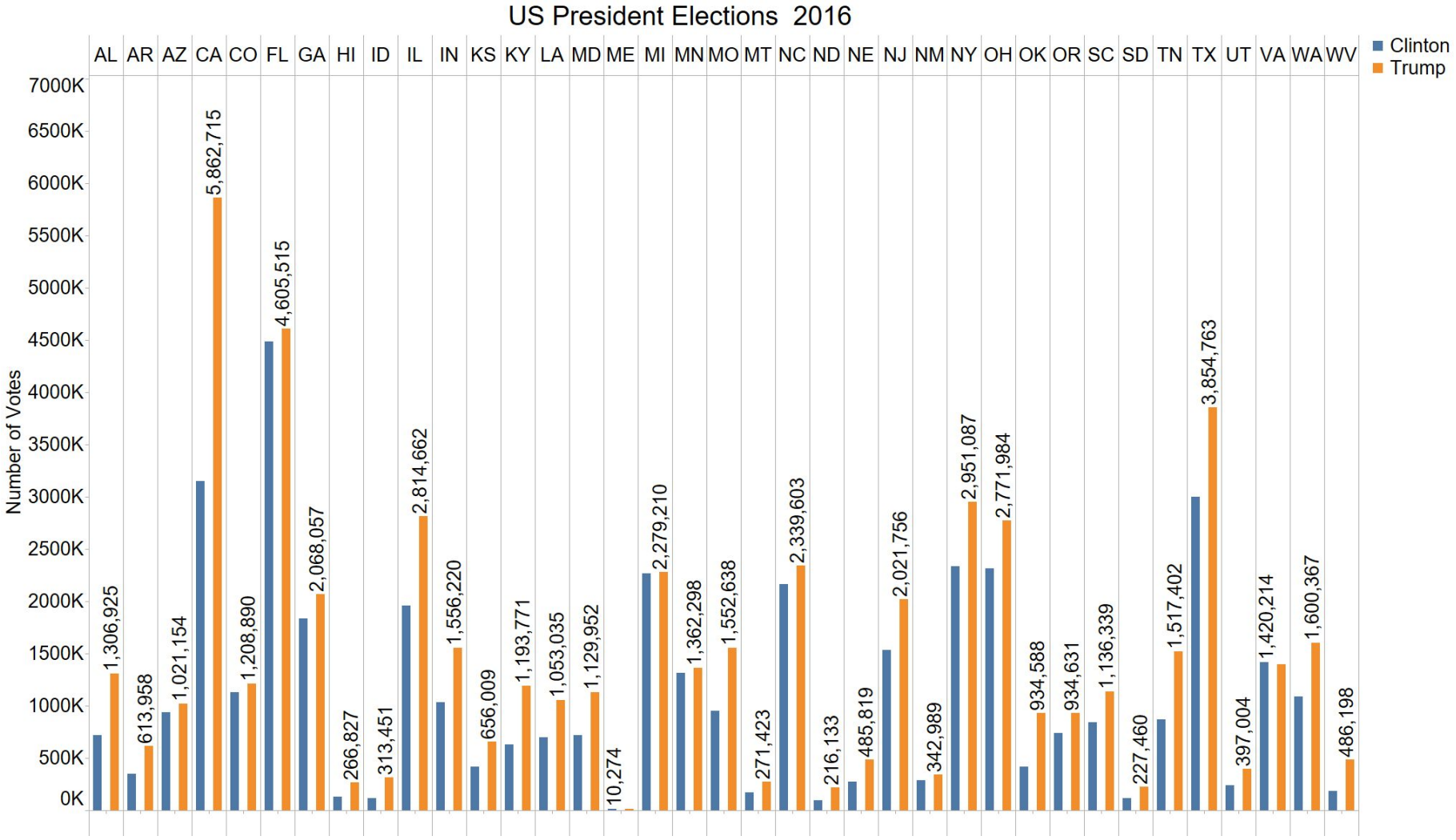
ANALYSIS: Elections Result 2016, counted by States



Note: calculated votes
Trump 54,763,093
Clinton 40,937,962

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ANALYSIS: Which factors were influential?

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Income and Density are significantly influential

Foreign, Bachelor, and Racial Diversity have influencing power

Further Research Next Steps

- Run analysis for data from all 50 states
- Conduct Random Forest analysis on the variables chosen