

# Predicting Fundraising Outcome

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MOST COMMON

**NEW** Matthew Relief

Medical

Volunteer

Emergencies

Education

Memorials

Sports

Animals

ALL CATEGORIES

Business

Charity

Community

Competitions

Creative

Popular Now

Near Me

Almost There

My Friends



\$23,807

**Support for the Greenberg Family**  
ROSWELL, GA

\$12,040

**Safe Homes for Children-Casa de...**  
HOLLIS, NH

\$36,434

**Help Baby Alexander**  
NEW LENOX, IL

\$7,263

**Help Disabled Writer; Needs to M...**  
TAKOMA PARK, MD

\$65,710

**Zurek Children's Education Fund**  
SALEM, NH

\$11,600

**Relief for Mrs & Mr Joyce and Ro...**  
CHICAGO, IL



Search

Start a Fundraiser

Share

Tweet

Donate



## Helping the Johnston Family

Share

Tweet

999 shares

Hi Everyone, this is a page for Michael Johnston and his family during a difficult time.

Some of you might know him from work, some of you might know him from boating. He's an incredible carpenter, a handyman in all sense of the word, he's an unselfish giver, and he's the best husband, dad, papa, son, brother.

This campaign is trending!

**\$8,152** of \$10k goal

Raised by 157 people in 2 days

**Donate Now**

Share on Facebook

Created October 11, 2016



Ryan Johnston

Emergencies

HOBART, IN

### Recent Donations ▾



**\$50**

Mike Paganelli

15 mins ago

Share

**\$100**





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Start a Fundraiser

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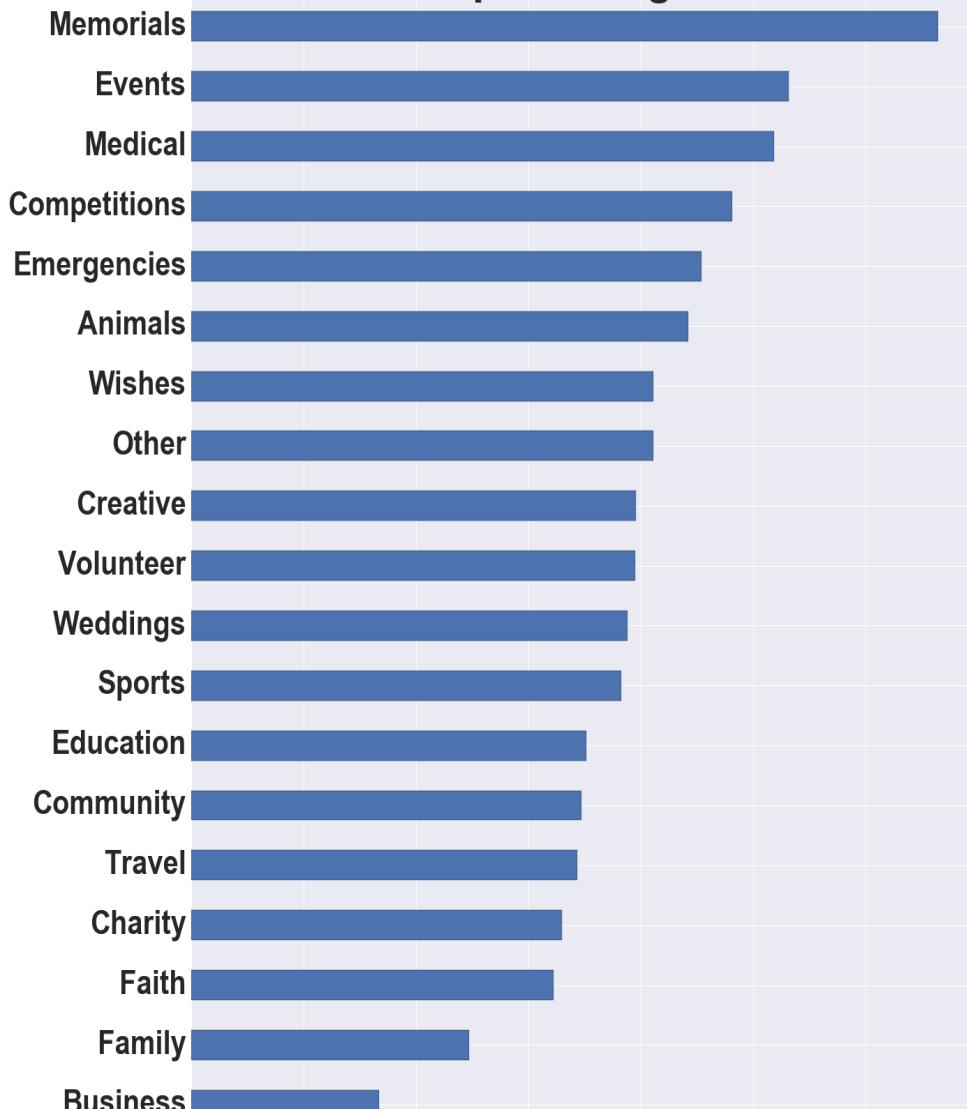
# Goal

\*Can we predict the outcome of funding campaigns?

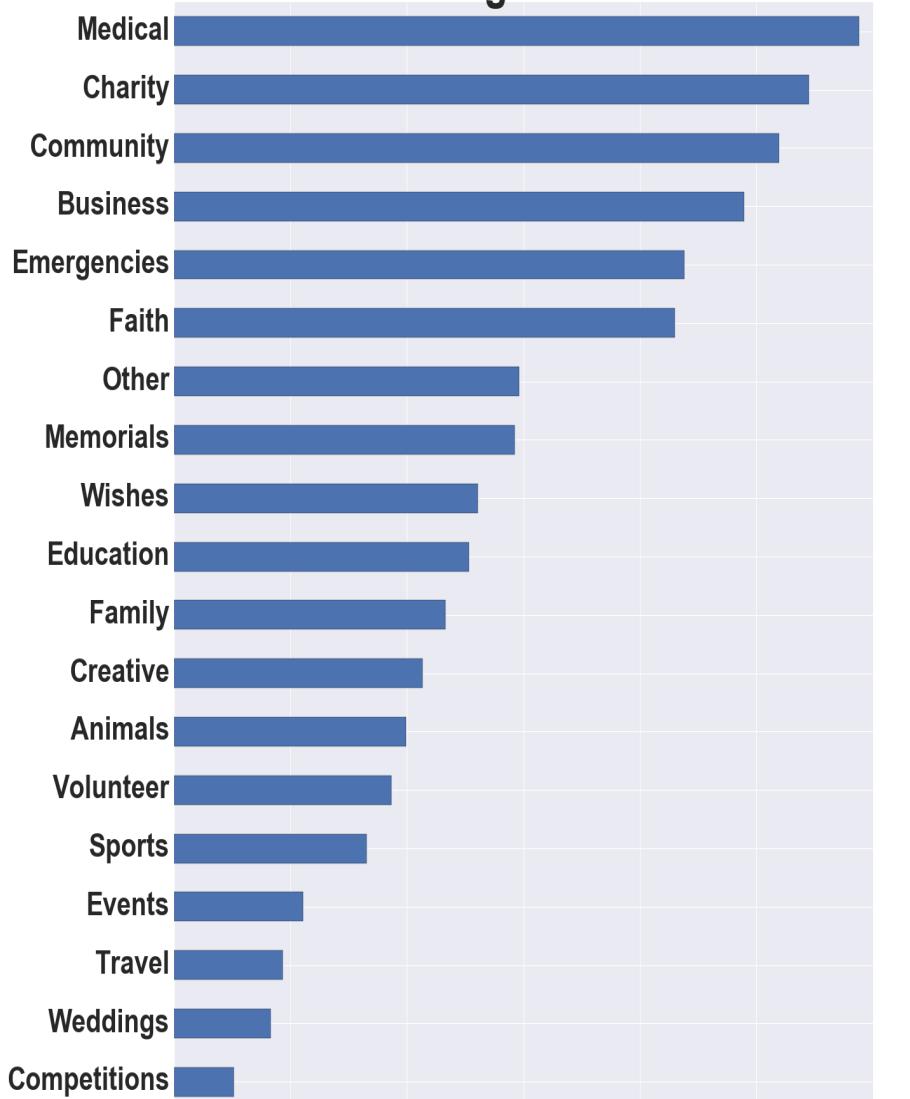
- \* Look up: Recommend people to similar other campaigns?
- \* What are the most common problems?
- \* How much funding people are seeking?
- \* How does the collection depend on shares, friends, days etc.?

# EDA:

percentage



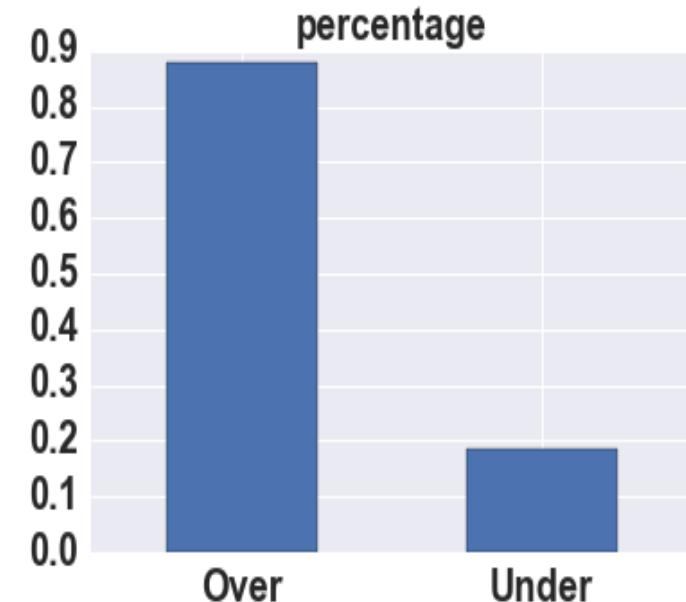
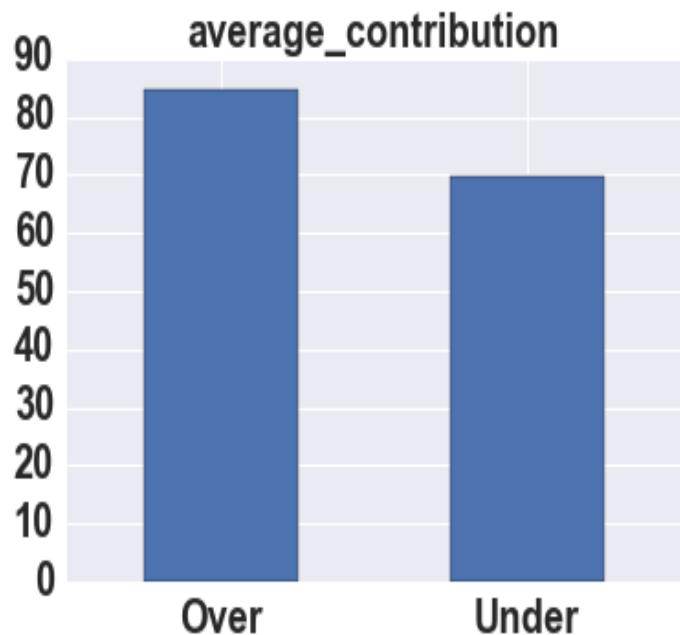
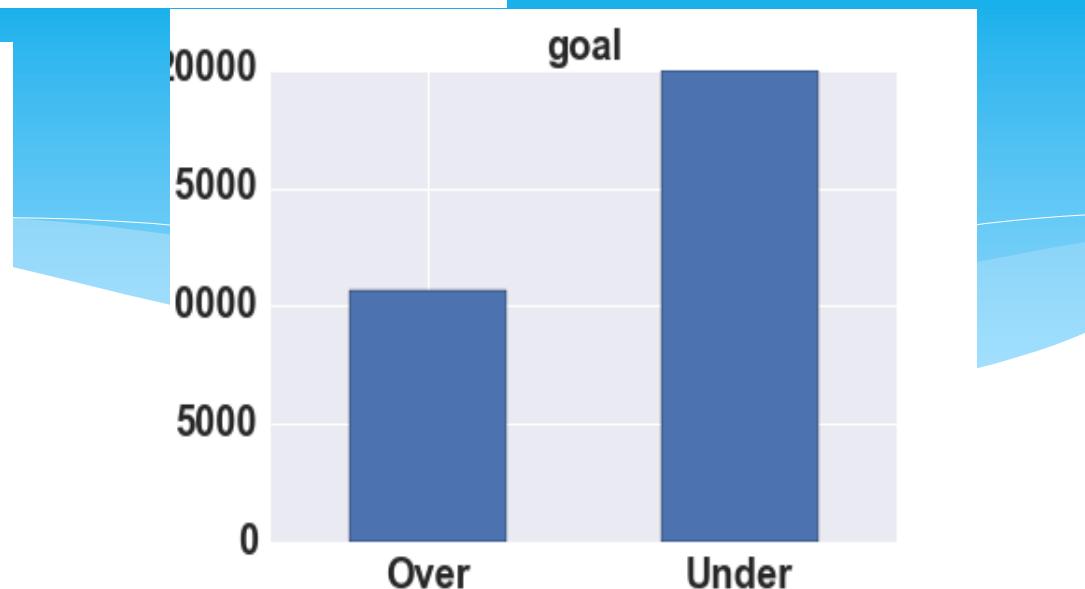
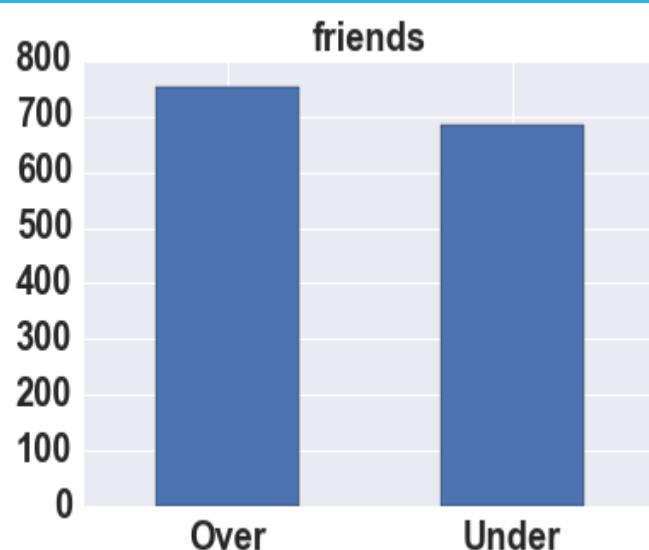
goal



0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7

0 5000 10000 15000 20000 25000 30000

# More on EDA

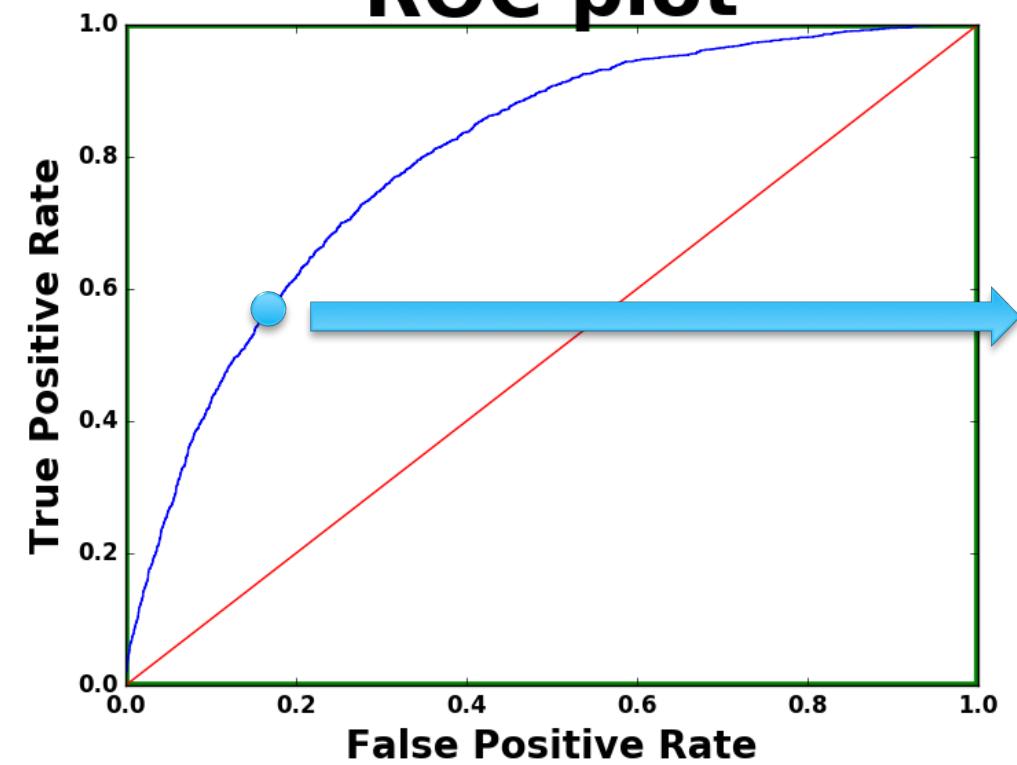


# Modeling

- \* Feature engineering (for numerical attributes and text)
- \* Tried many supervised and unsupervised models
- \* NLP on campaign's story for recommending similar stories

# Results on Test-data

## ROC plot



## Confusion Matrix

		Under	Over
Under	True	TN 3805	FP 649
	Over	FN 1031	TP 1242
Under	Predicted	Under	Over

# Prediction/Recommendation

A screenshot of a web browser window displaying a fundraising campaign prediction application. The URL in the address bar is `localhost:8080`. The main heading is "Welcome to fundraising campaign prediction!!!". Below it is a navigation menu with links to Home, About, Prediction methods and tools, and Contact. A large green button with the text "Hello!" is prominently displayed. The page content includes a welcome message, instructions about the website's purpose, and a note about success criteria. It also features a form for entering a campaign URL.

← → C ⓘ localhost:8080 ☆ O !

## Welcome to fundraising campaign prediction!!!

Home   About   Prediction methods and tools   Contact

---

### Hello!

Welcome to Fundraising Campaign

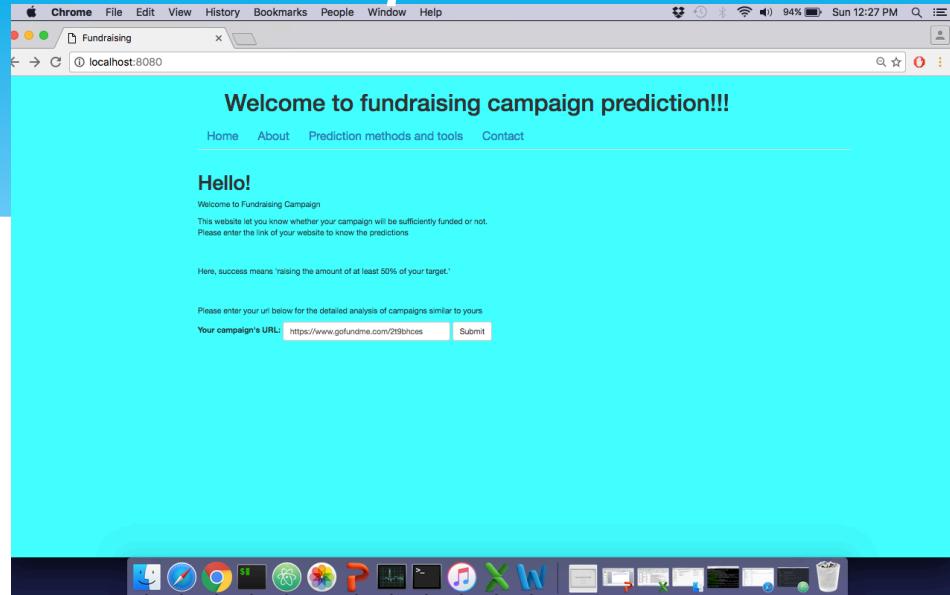
This website let you know whether your campaign will be sufficiently funded or not.  
Please enter the link of your website to know the predictions

Here, success means 'raising the amount of at least 50% of your target.'

Please enter your url below for the detailed analysis of campaigns similar to yours

Your campaign's URL:

# Prediction/Recommendation



A screenshot of a GoFundMe campaign page for "Safe Homes for Children-Casa de Sion". The page features a large photo of several children smiling. Key statistics shown include a goal of "\$9,590" raised from "\$30k" over 7 days by 520 people. A "Donate Now" button is prominently displayed, along with a "Share on Facebook" button. The campaign was created on October 7, 2016, by Saira Valley on behalf of Flossie Green, located in Education, HOLLIS, NH. A "Recent Donations" section shows a single donation of \$10 from Roberta Rose made just 1 minute ago. Navigation links at the top include "gofundme", "Search", and "Start a Fundraiser".

# Welcome to fundraising campaign prediction!!!

Home   About   Prediction methods and tools   Contact

**According to your current stats, probability of succeeding is 28.0%.**

Here are the similar camapign recommendations for you.

These recommendations are based on your story.

Category	Days	Title	Facebook friends	Shares	Goal	Percentage	Keywords	URL
Volunteer	19	The Sri Udom Orphanage & School	559	15	1000.0	1.04	orphanage thailand child volunteered project 1,000 kid condition room summer	<a href="https://www.gofundme.com/sriudom?ssid=772552195&amp;pos=1&amp;pc=algolia">https://www.gofundme.com/sriudom?ssid=772552195&amp;pos=1&amp;pc=algolia</a>
Charity	84	Maison-Rose Orphanage Hinche, Haiti	291	370	2500.0	1.05	orphanage haiti s dollar street cooking cleaning u feed clothing	<a href="https://www.gofundme.com/2cur5j9y?ssid=772552211&amp;pos=1&amp;pc=algolia">https://www.gofundme.com/2cur5j9y?ssid=772552211&amp;pos=1&amp;pc=algolia</a>
Other	8	Hong Quang Orphanage Phu My Vietnam	136	41	1500.0	0.71	orphanage child abandoned clothes supply time visit vietnam formula milk	<a href="https://www.gofundme.com/25sp4gw4?ssid=772552219&amp;pos=1&amp;pc=algolia">https://www.gofundme.com/25sp4gw4?ssid=772552219&amp;pos=1&amp;pc=algolia</a>
And your stat is..								
Education	9	Safe Homes for Children- Casa de Sio	765	508	30000.0	0.4		

# Welcome to fundraising campaign prediction!!!

[Home](#) [About](#) [Prediction methods and tools](#) [Contact](#)

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Charity	84	Maison-Rose Orphanage Hinche, Haiti	291	370	2500.0	1.05	orphanage haiti s dollar street cooking cleaning u feed clothing	<a href="https://www.gofundme.com/2cur5jy?ssid=772552211&amp;pos=1&amp;pc=algolia">https://www.gofundme.com/2cur5jy?ssid=772552211&amp;pos=1&amp;pc=algolia</a>
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And your stat is..								
Education	9	Safe Homes for Children-Casa de Sio	765	508	30000.0	0.4		

Rec  
1

The Sri Udom Orphanage & School



Raised by 26 people in 1 month

**Donate Now**

**Share on Facebook**

Created September 11, 2016

Beverly Tran  Volunteer SPRINGFIELD, VA

**Recent Donations**

-  \$10 Mai Linh Ho 15 days ago **Share**
-  \$100 Co Dung 19 days ago **Share**

**Story** **Updates (1)**

Recently this summer, my friend Naomi and I volunteered with a program called Greenway in Sing Buri, Thailand. We are both high school students from the United States so stepping foot into this small province of Thailand was very different and

## Recommendations

Rec  
2

This campaign is trending!

**\$1,500 of \$1,500 goal**

Raised by 13 people in 27 days

**Donate Now**

**Share on Facebook**

Created September 17, 2016

Trevor Sheahan  Other Kingscliff, NSW

**Recent Donations**

-  \$40 Denise & Len DeVene 5 days ago **Share**

Can't leave this wonderful cause with only small amount to achieve your goal

Maison-Rose Orphanage Hinche, Haiti



**\$3,440 of \$5,000 goal**

Raised by 39 people in 3 months

**Donate Now**

**Share on Facebook**

Created July 5, 2016

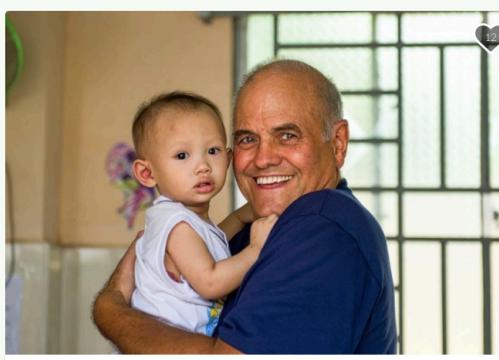
Juanita Michelle Gober  Charity OLYMPIA, WA

**Recent Donations**

-  \$25 Anonymous 2 days ago **Share**
-  \$25 Kimberly Coerper **Share**

**Story** **Updates (3)**

Hong Quang Orphanage Phu My Vietnam



**\$1,500 of \$1,500 goal**

Raised by 13 people in 27 days

**Donate Now**

**Share on Facebook**

Created September 17, 2016

Trevor Sheahan  Other Kingscliff, NSW

**Recent Donations**

-  \$40 Denise & Len DeVene 5 days ago **Share**

Can't leave this wonderful cause with only small amount to achieve your goal

Rec  
3

# Summary

- \* More people asking money in medical, memorials
- \* ... Ask for less money.....for successful campaign
- \* More friends doesn't mean success
- \* Sharing is important
- \* Write the short story. People are too lazy to read
  
- \* Predicted the campaign outcome
- \* Guide to the successful campaigns of similar type



Thank you!!!

## For Questions/Comments:

Email:[baseltp@gmail.com](mailto:baseltp@gmail.com)

Linkedin: [www.linkedin.com/in/tek-basel](https://www.linkedin.com/in/tek-basel)

Github: <https://github.com/tb16>

# Extras

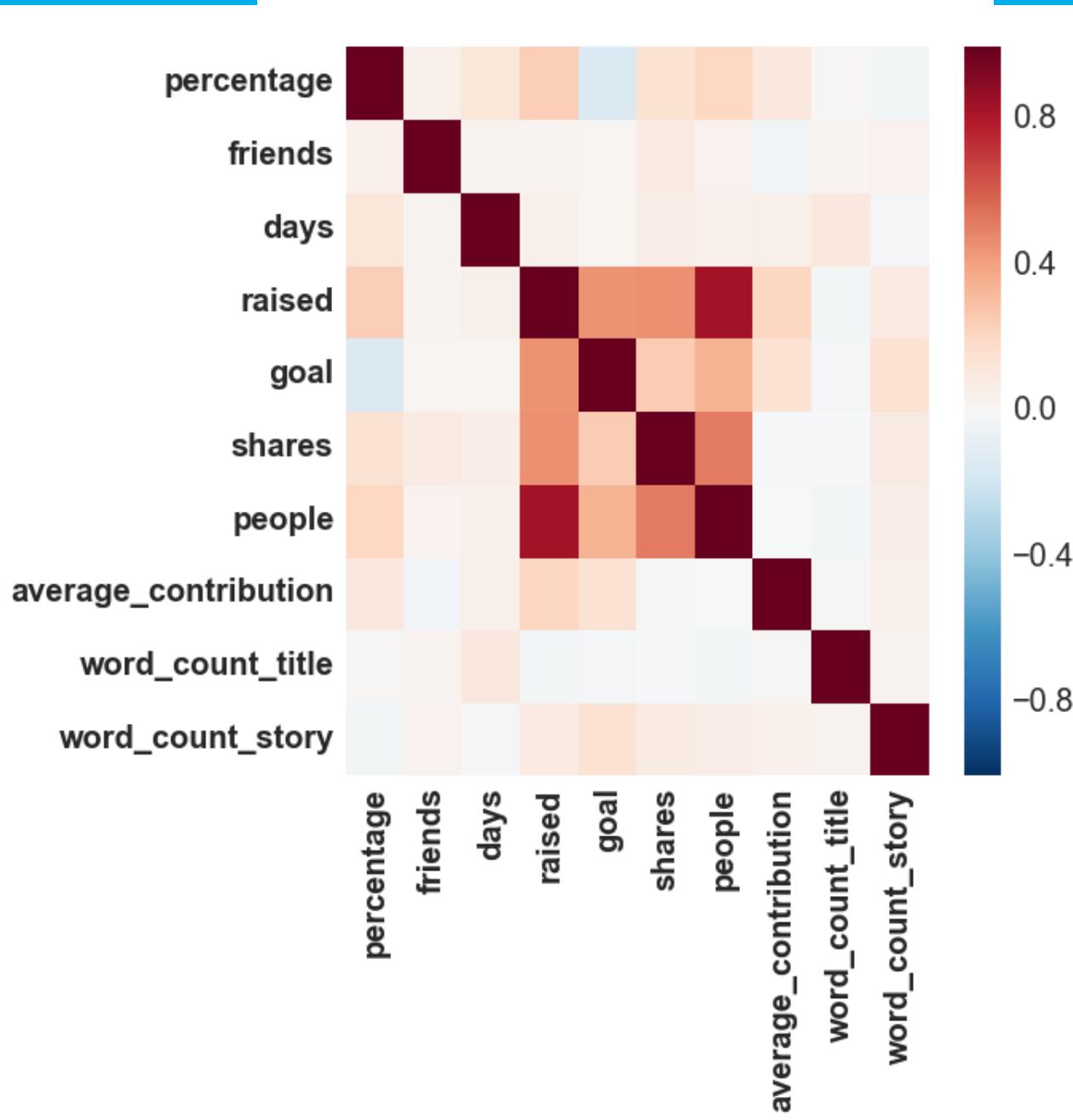
# CM

- \* [[3876 578]]
- \* [[1150 1123]]
- \* GBC cm
- \* [[3792 662]]
- \* [[1000 1273]]

# Models Comparison

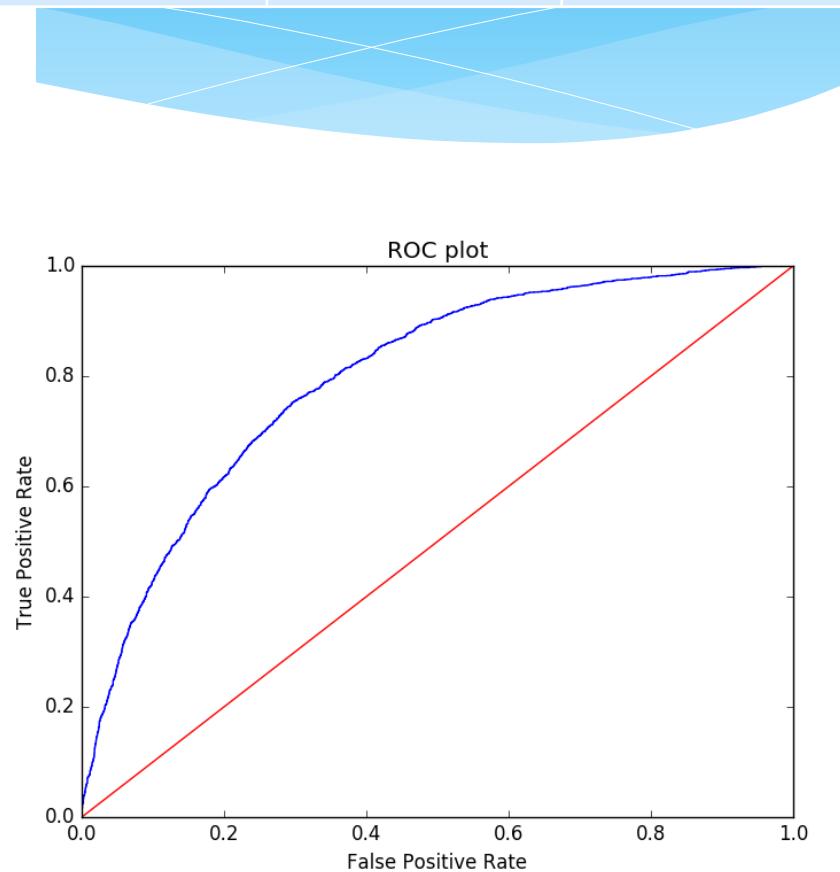
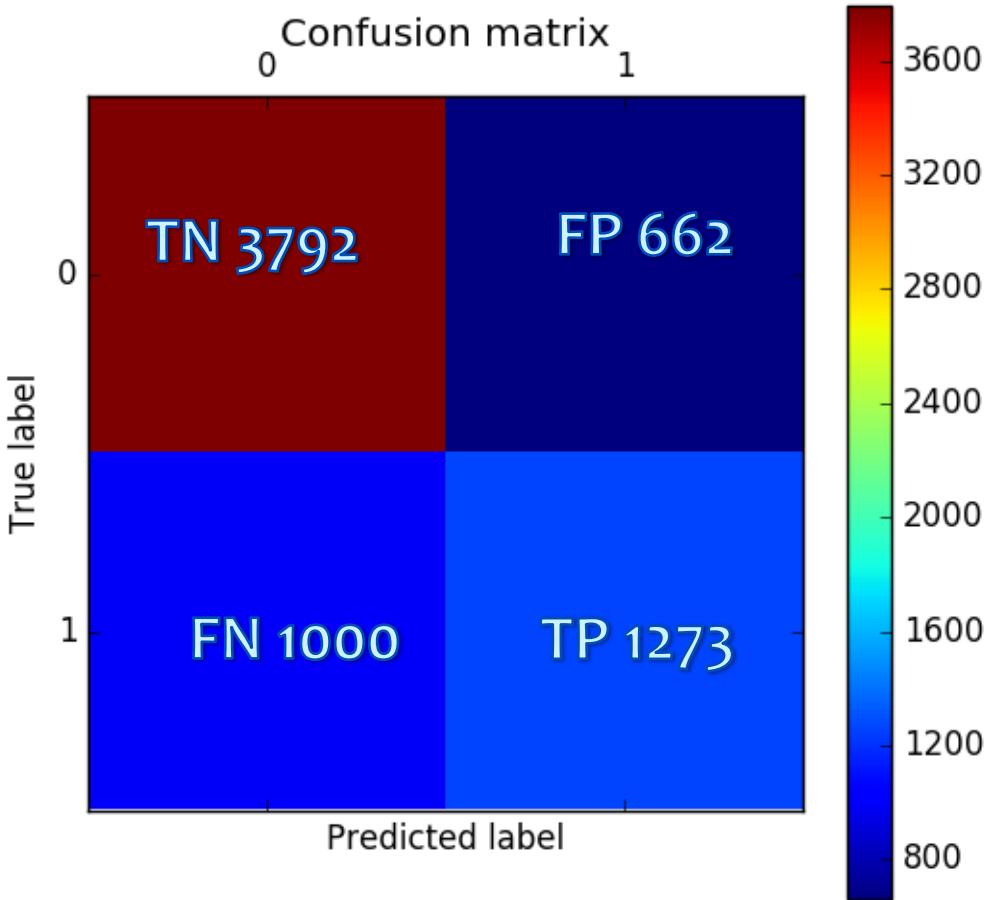
Model	accuracy	f1	precision	recall	auc
RandomForest	74	57	66	50	68
GradBoost	75	60	66	55	70
AdaBoost	72	48	66	38	64

# EDA: Correlation



# Results on Test-data

Model	accuracy	f1	precision	recall	auc
GradBoost	75	60	66	55	70



# Process

- \* Scraping and pre-cleaning
- \* Feature engineering and EDA
- \* Modeling
- \* Web app
  
- \* **Modeling:**
- \* Logistic regression
- \* Decision Trees
- \* Random Forest
- \* AdaBoost
- \* Gradient Boosting
- \* SVM
- \* KNN
- \* NMF
- \* PCA
- \* Kmeans
- \* Multinomial Naïve Bayes

