



GivaMe! Evaluate Your Kiva Campaign

Chao Li
Insight 2019B

Kiva.org: world's first micro-lending platform



37% funded

Fundraising period:
30 days

29 days left

\$3,775 to go

Total loan: \$6,075

Powered by 44 lenders

Allison Tereza



Lima, Peru / Higher education costs

\$25 ▾

Lend now

Allison Tereza's story

Allison is young Graphic Design student at Senati. She lives with her parents. Her mother is a seamstress and her father sells tennis shoes.

She is studying Graphic Design because she likes the idea of capturing her's and other's ideas into something concrete or digital. The idea of helping others makes her very happy also that her creations are admired by others makes her excited and proud.

When she finishes her career, she would like to capture her ideas into banners or ads created by her and her Graphic Design business, showing the world what she can do through her talents and what she has learned.

She started 4 months and she will graduate in 2 more years.

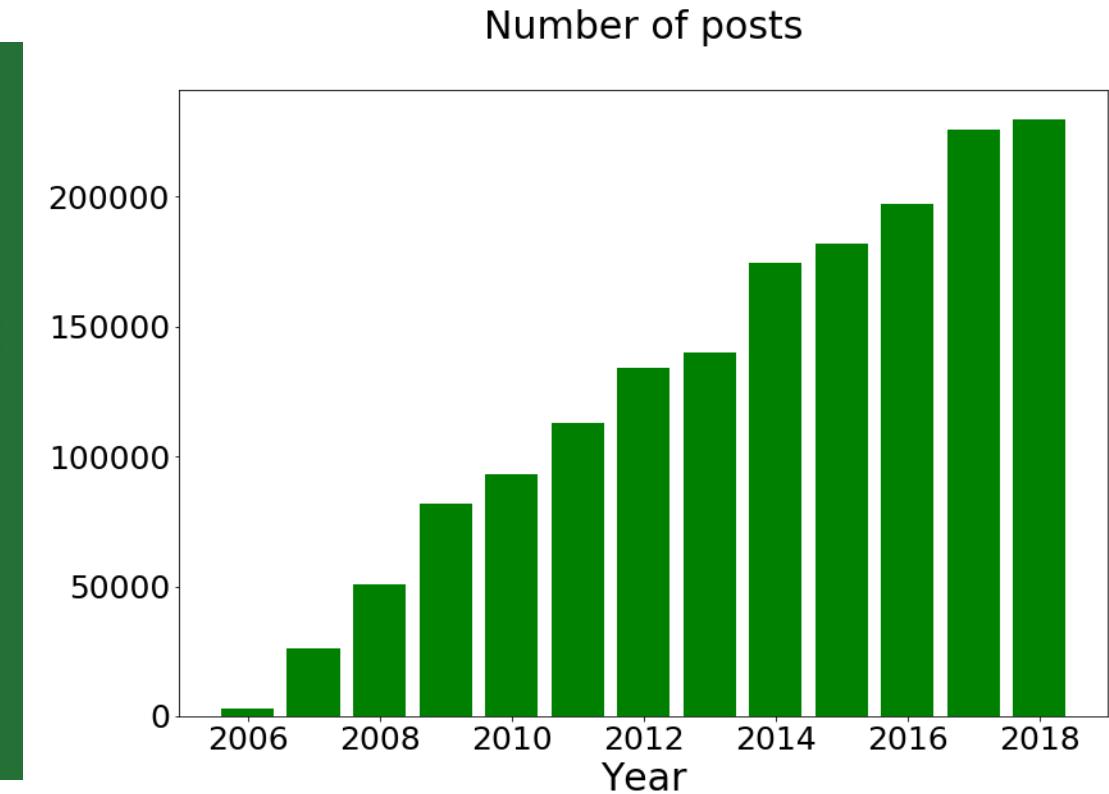
The biggest obstacle that jeopardizes her continuing with her studies is the family economy as they are going through some hardships that won't allow her to fight for her dreams.

Allison is very happy and excited that others believe in her, that is why she wants to dedicate some words to KIVA's supporters: "thank you for believing in me, I will give my 100% and won't disappoint you and I assure you that you have made the best investment. Many thanks for helping me achieving my dream, to continue studying to become a professional"

Needs: Number of non-funded Kiva loans are increasing!

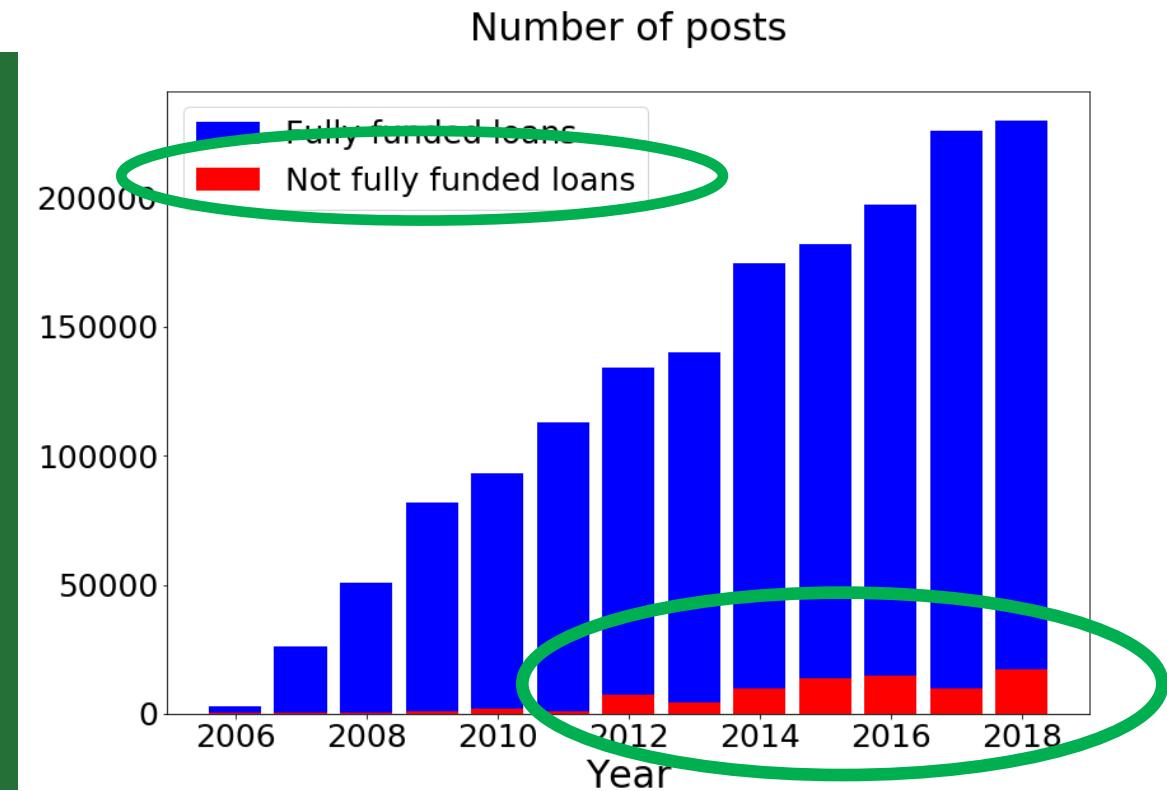


3



Needs: Number of non-funded Kiva loans are increasing!

4

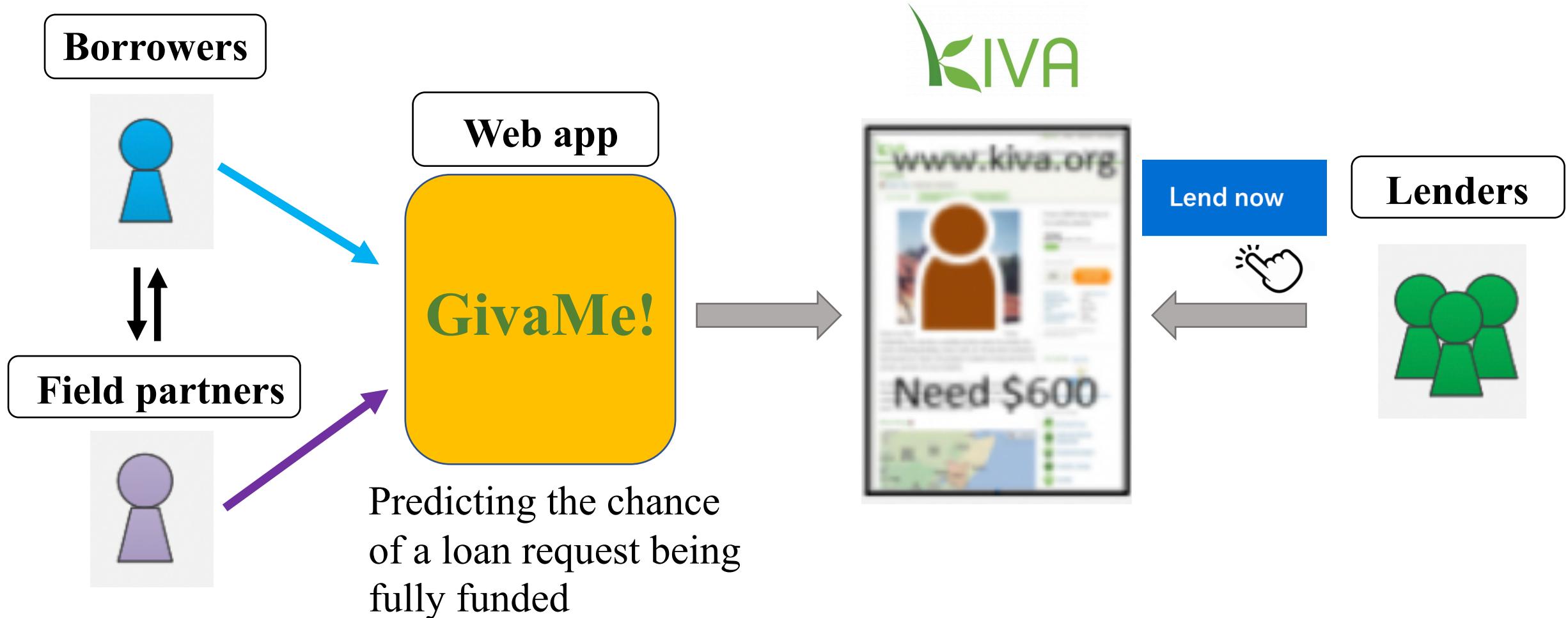


Proposed solution

5



Proposed solution



Baseline model



Features from Kiva website:

Borrowers

- Number of female
- Number of male

Field partners

- Directly
- With field partners

Loan details

- Loan amount
- Loan use
- Loan term
- Repayment method

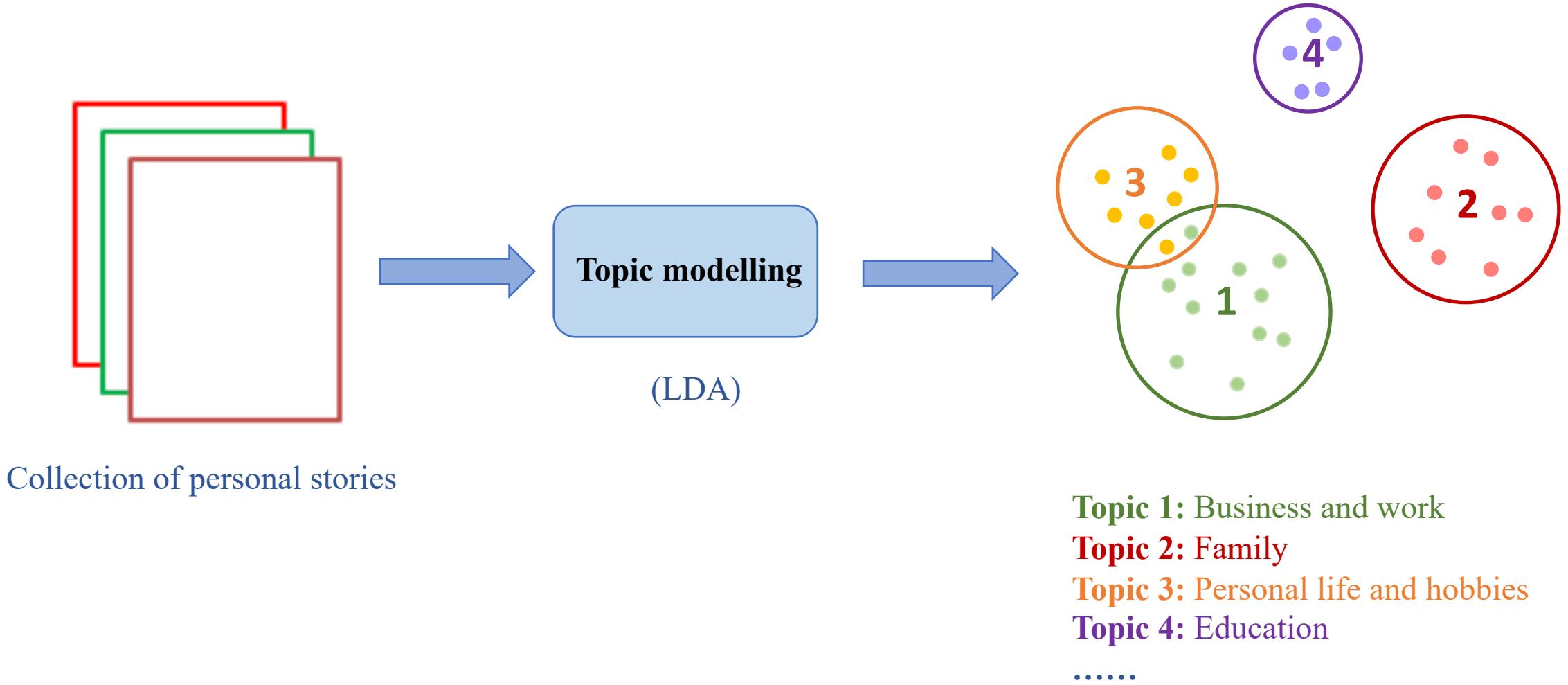
Random Forest
classifier



AUC score: **62%**

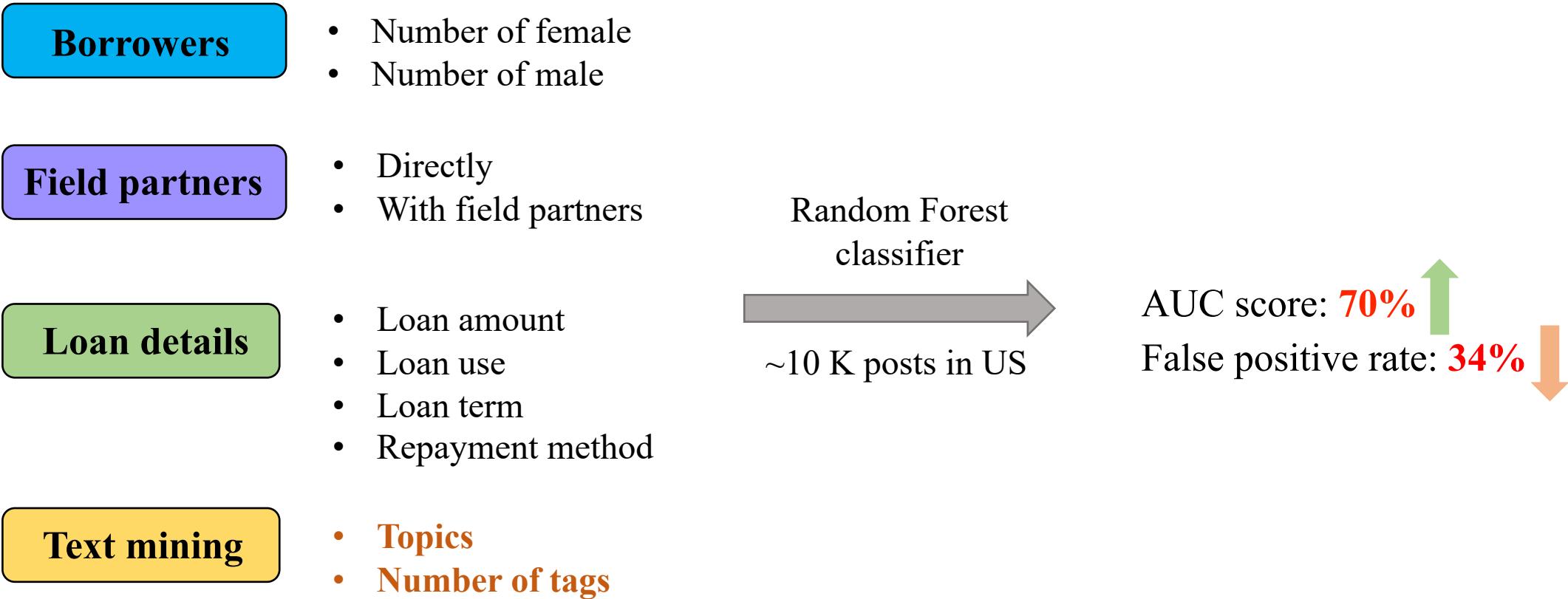
False positive rate: **37%**

Topic modeling on personal stories



Model and validation

- Random forest classifier with features from topic modeling

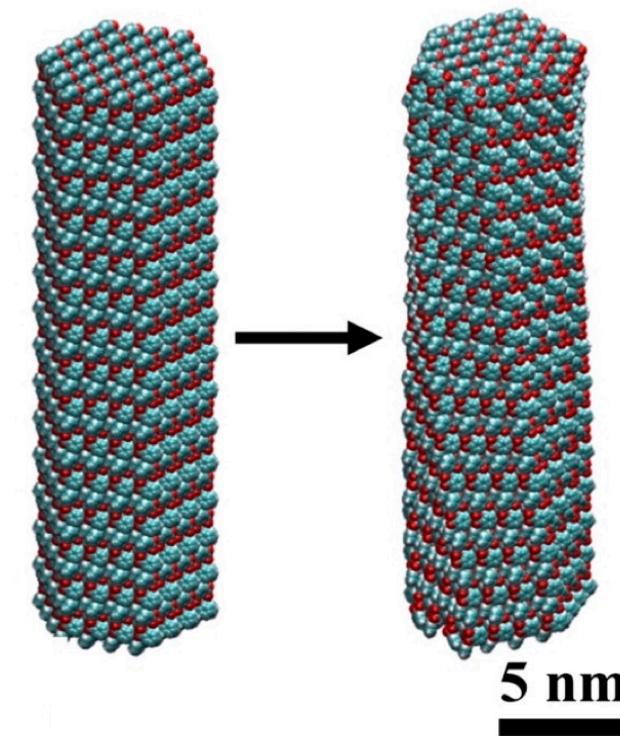
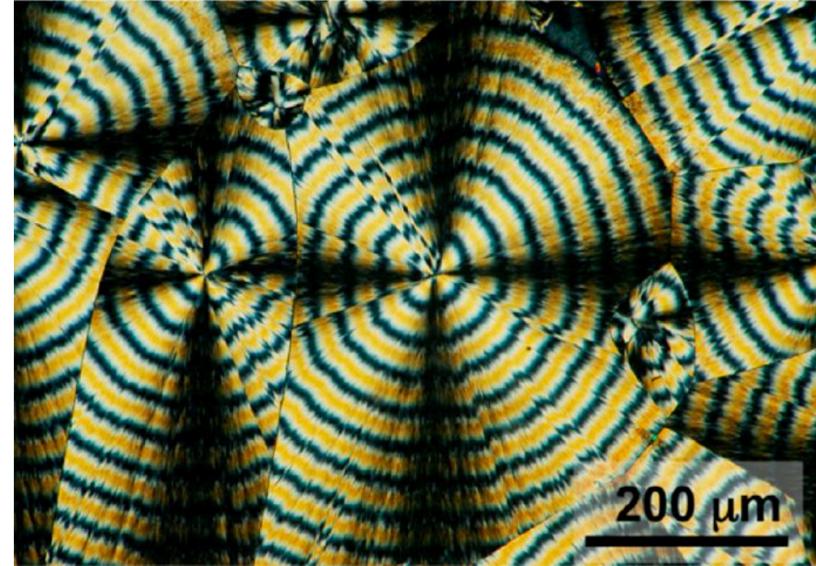


Demo

<http://givamekiva.com/>

About Me

Chao Li



Baseline model

Features from Kiva website:

Borrowers

- Country
- Female/Male

Field partners

- Partner risk rate
- Total loans posted
- Total amount raised
- Default rate

Loan details

- Loan amount
- Loan use
- Loan term
- Repayment method

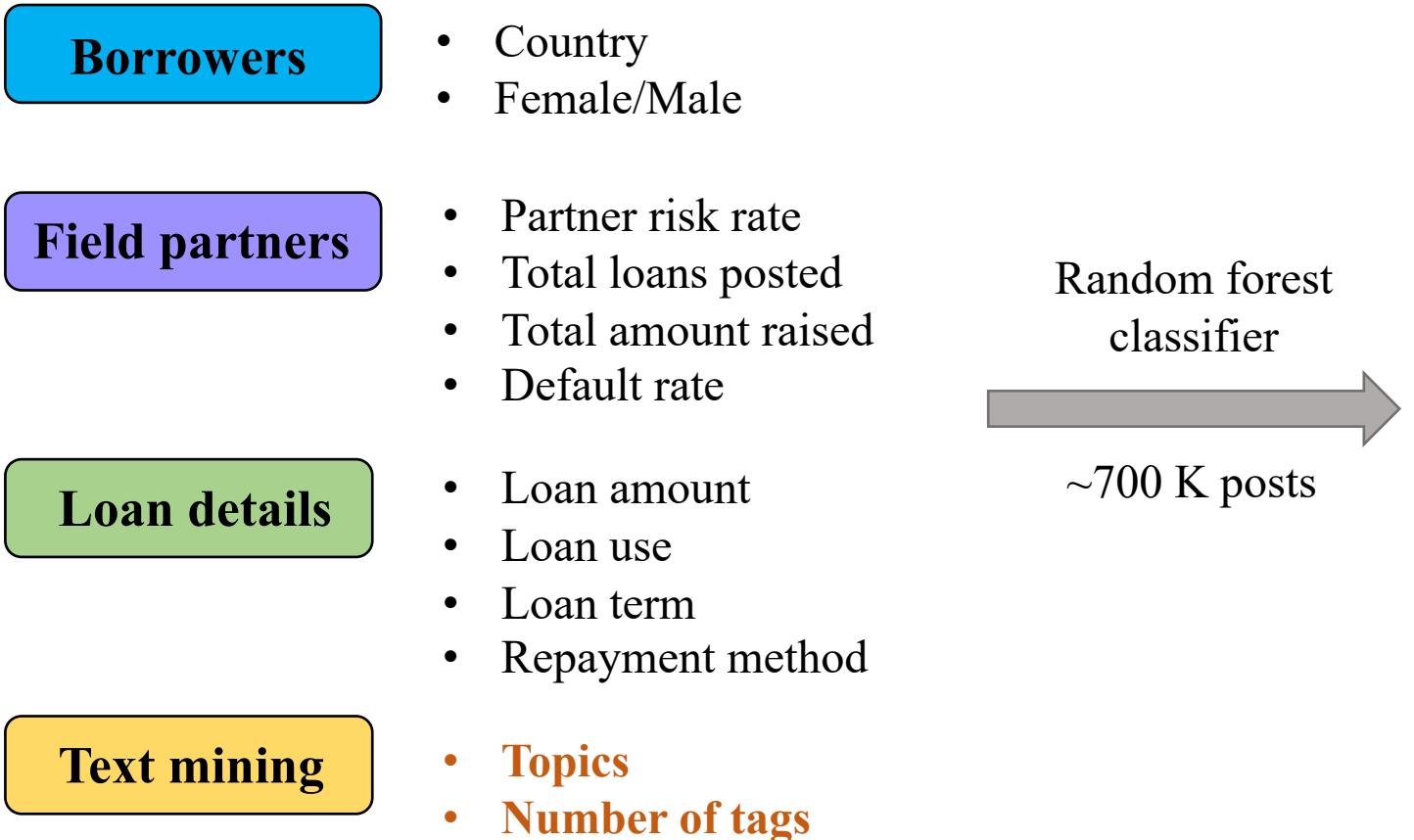
Random forest
classifier



~700 K posts

Model and validation

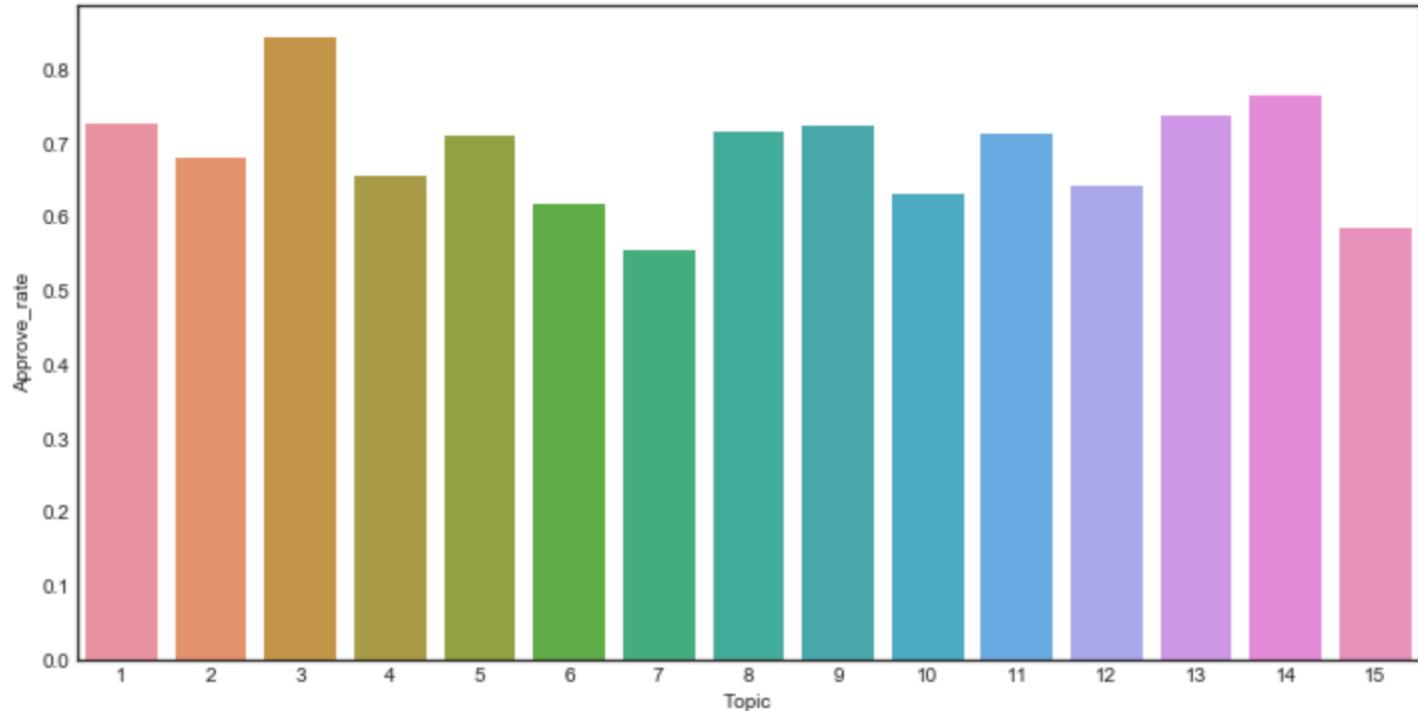
- Random forest classifier with features from topic modeling



Topic modeling

Topics from personal stories

Latent Dirichlet Allocation



Topic 1: business, life, work, hard

Topic 2: people, community, world, city

Topic 3: loan, need, help, purchase

Topic 4: food, farm, kitchen, cooking

Topic 5: family, school, business, work

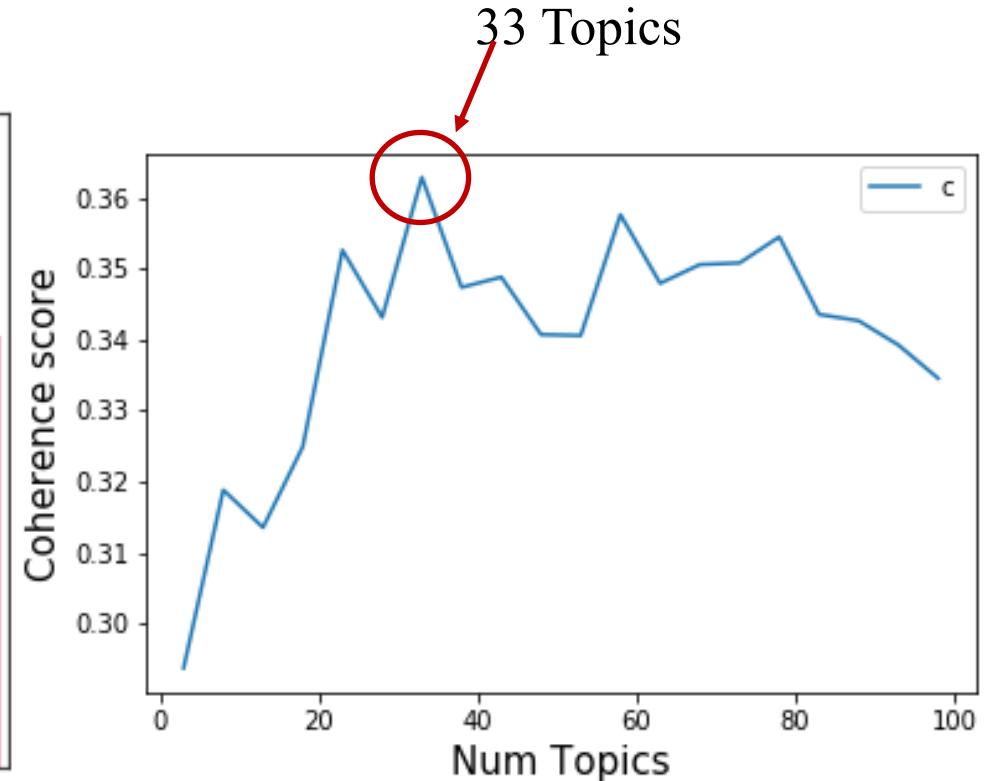
Topic 6: health, family, cancer, care

Topic 7: school, university, education, degree

Topic 8: support, start, new, future

Topic 9: company, job, work, opportunity

Topic 10: coffee, fashion, music, clothing



33 Topics

Baseline model

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Loan details

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Random forest
classifier

~700 K posts

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Predicted

Expired Funded

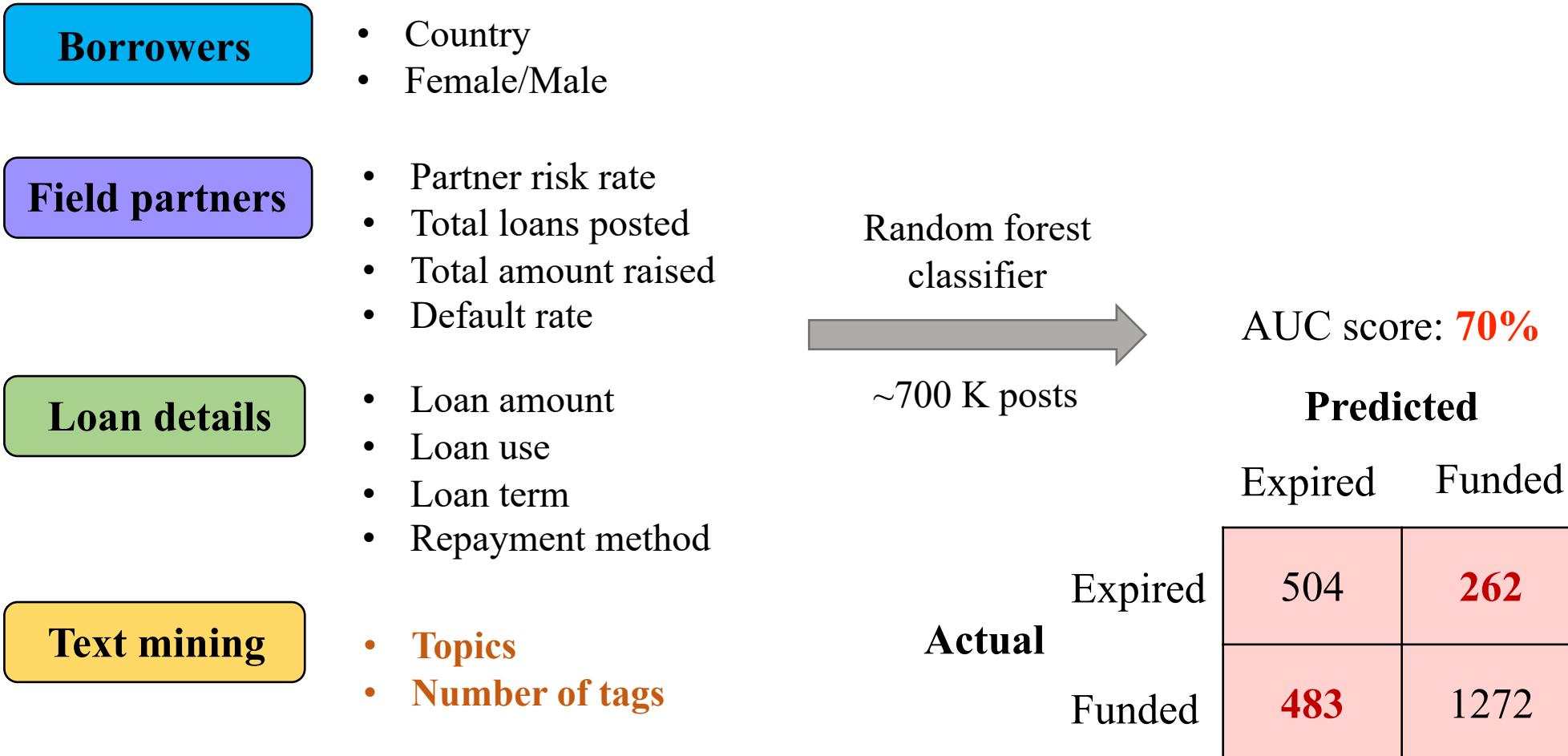
Actual
Expired

482	284
649	1106

Funded

Model and validation

- Random forest classifier with features from topic modeling



Feature	Importance/%
Loan amount	27.78
Num_tag	26.56
Topic of personal story	13.38
Loan use	10.18
Repayment method	8.73
Distribution model	8.17
Number of female	2.33
Number of male	2.20