



Machine Learning for Community Forecasting

Team 6: DataScape

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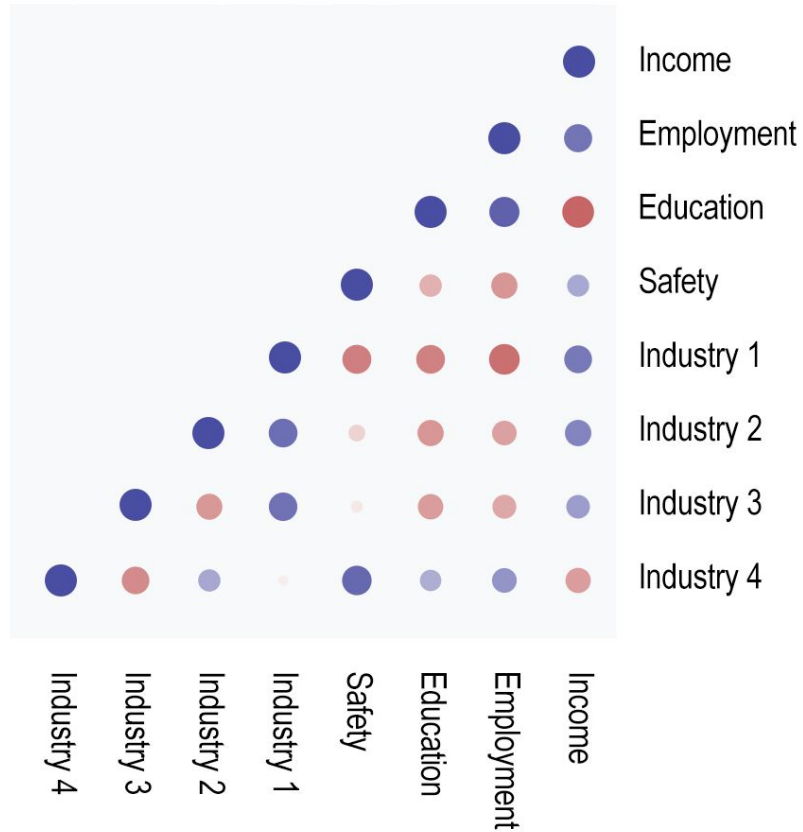


Our Challenge

To determine where
volunteer reward programs
will have the greatest impact



Correlation matrix of key indicators



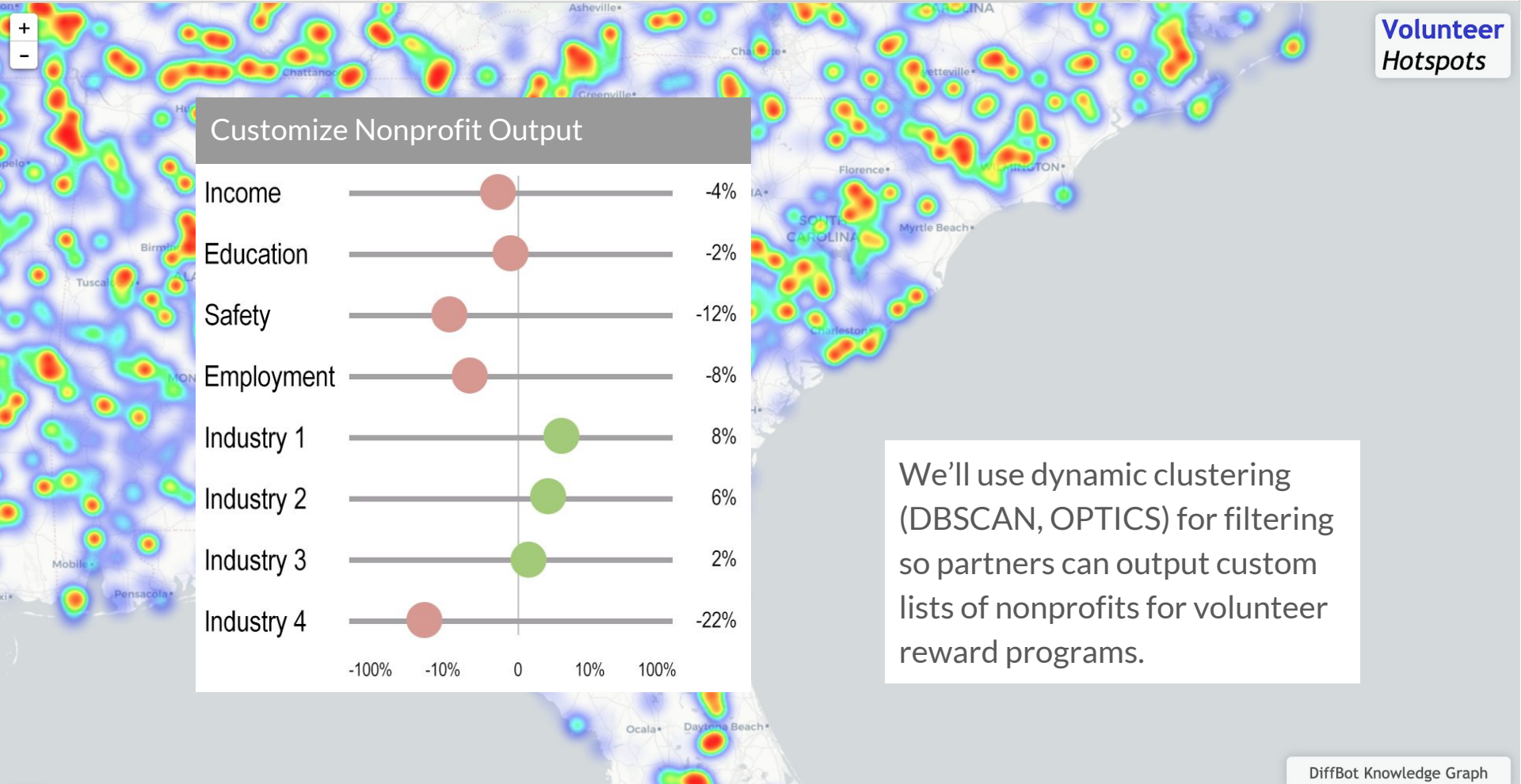
We'll use multiple indicators to predict economic patterns

- Strong positive correlation
- Strong negative correlation
- Weak positive correlation
- Weak negative correlation

Safety ratings based on FBI crime reports

Employment levels for multiple industries

DiffBot Knowledge Graph for related details



Volunteer
Hotspots

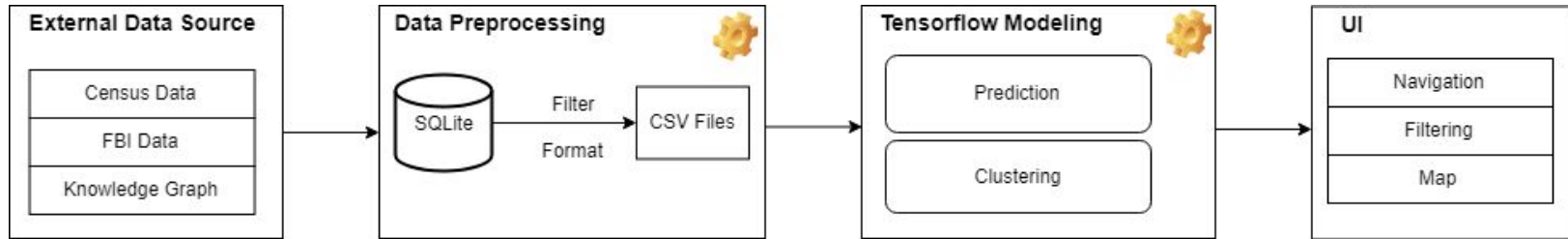
Customize Nonprofit Output



We'll use dynamic clustering (DBSCAN, OPTICS) for filtering so partners can output custom lists of nonprofits for volunteer reward programs.



Our Workflow



Location

Southeast, USA

Industries

NAICS Category Filters

Economic Indicators

Income, Education, Safety, Employment

Output Results

Volunteer Rewards Campaign

**Volunteer
Hotspots**

Measuring Success

Balanced Risks - Outputs adjusted using weighted indicator sliders.

Community Payoffs - Planned incentive encouraging volunteering at hotspot areas.

Broader Impact - Communities in decline will receive more support for revitalization!



Thank You!



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