



# StackExchange Data Analytics

Project by :- Ashwin Bhide, Chaitanya Bapat  
Nidhi Menon, Sneha Venkat, Vaibhav Tendulkar





# Current Situation

- Questions go unanswered
- People answer for “points” rather than to provide the correct answer
- Absence of question routing to experts



# Objectives

- Given a question, find expert users to answer
- User engagement driven ML solution
  1. Visualizing StackExchange as a Graph
  2. Applying ML algorithms



# Literature Survey

- Understanding StackOverflow using Quantitative, Qualitative analysis
  - “Design Lessons from the Fastest Q&A Site in the West”
- Recommends questions to users based on their novel algorithm
  - “Question Recommendation for Collaborative Question Answering Systems with RankSLDA”



## Literature Survey (contd.)

- Feature-based recommendation approach using Random Forest classifier
  - “Who will Answer my Question on Stack Overflow?”
- A generative modelling approach combining topic-level information with term-level similarity for expert recommendation
  - “Tapping on the Potential of Q&A Community by Recommending Answer Providers”



# Our Approach

- Feature extraction to identify experts
- Analyze user engagement using visualization software
- Reason for Success :
  - Increase in answer accuracy due to intelligent question routing



## Our Approach (contd)

- Measure of Success - Ratio of predicted users to groundtruth
- Risks and Payoffs - Accuracy and Time
- Cost - None (open source)
- Time - 45 days



# Timeline

- Milestone 1
  - Data Cleaning, Feature Extraction
  - Preliminary Data Analysis and Visualization
- Milestone 2
  - Fine Tuning Data Analysis
  - Final Visualizations





# **Thank You!**

-Messiahs