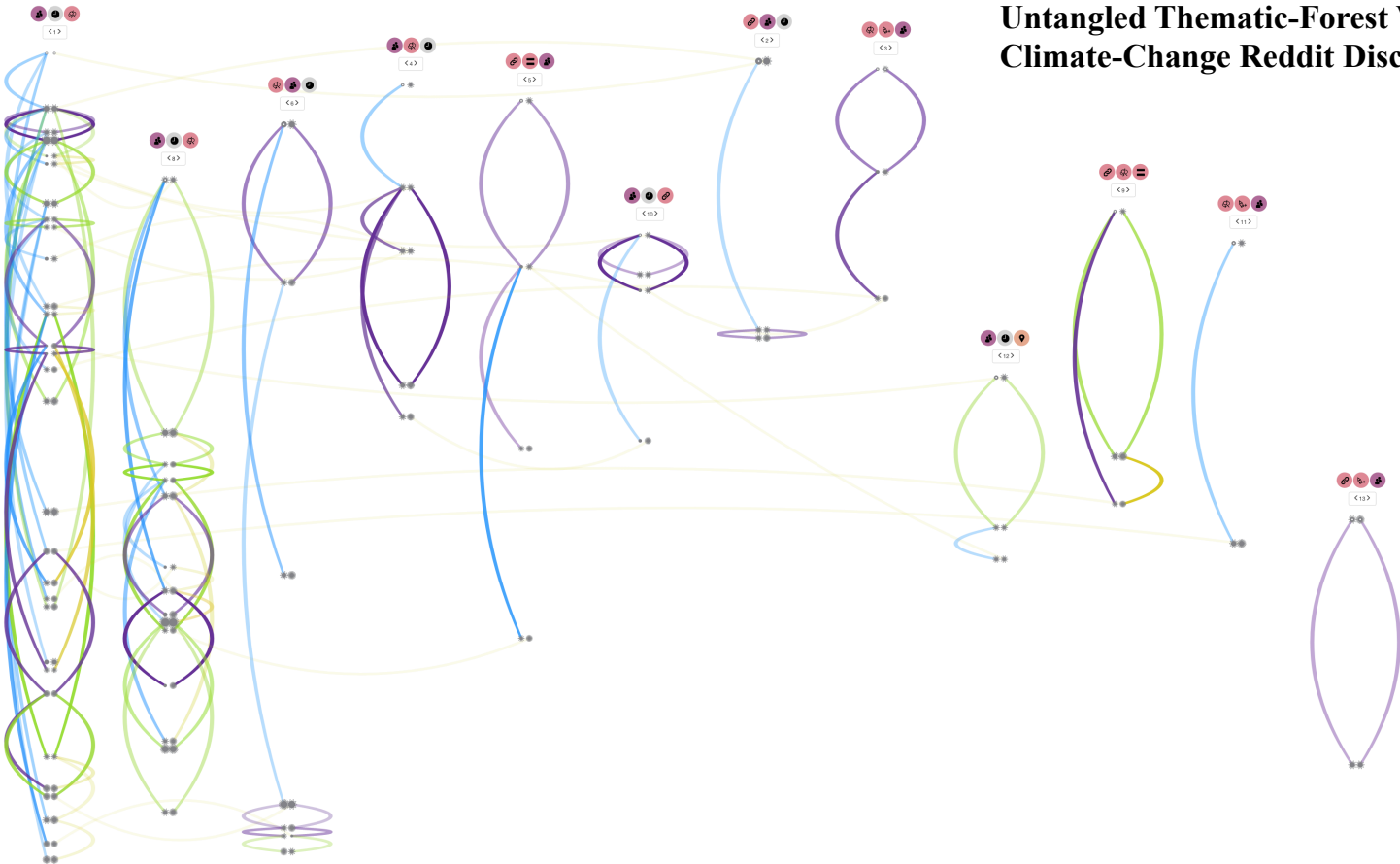
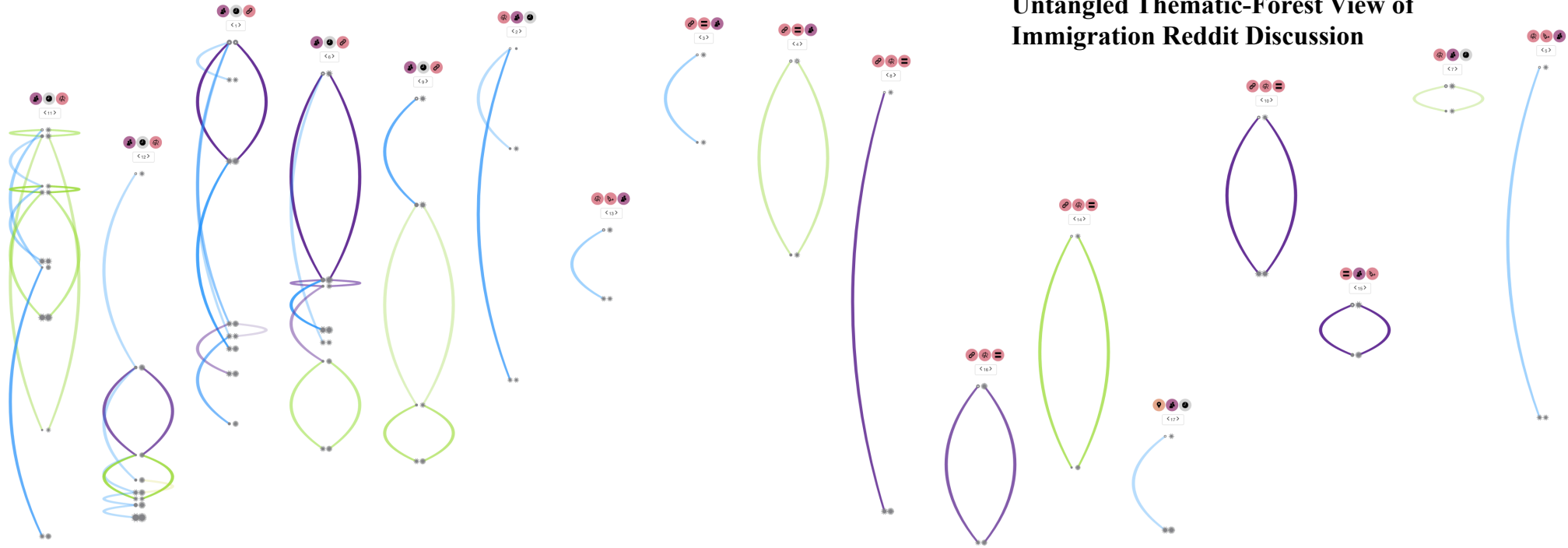


Untangled Thematic-Forest View of Climate-Change Reddit Discussion



- 🌍 earth
- 🌍 earth
- 🌍 real
- 🔬 scientific
- 🗑️ dismiss
- 📄 the evidence is overwhelming . can you provide any cases of mainstream scientists falsifying data ?
- 📄 /wiki/scientific_opinion_on_climate/?wprov=sfla1
- 🗑️ paris
- 🗑️ doesn't matter how much evidence there is
- 🔬 renewable energy
- 🗑️ government
- 🌍 atmospheric
- 📄 year
- 🗑️ climate change
- 🗑️ bullshit
- 🔬 such a small
- 🗑️ draw
- 🗑️ there is no way anyone should be making claims on such a small dataset . that is not scientific .
- 🗑️ trump
- 🗑️ evidence there is
- 🔬 renewable
- 🗑️ http
- 🌍 isotopic
- 🔬 800,000 year
- 🌍 climate
- 🗑️ climate change
- 🌍 draw
- 🗑️ evidence
- 🔬 800,000
- 🌍 change
- 🗑️ time
- 🗑️ scientist
- 🗑️ overwhelm
- 🗑️ matter
- 🔬 ice core
- 🌍 human
- 🗑️ refute
- 🗑️ data
- 🗑️ mainsteam
- 🗑️ ly
- 🗑️ fudge
- 🗑️ blatant
- 🗑️ 800k year
- 🌍 planet
- 🗑️ but the real issue is that it probably took me more time to refute your bullshit than it took you to make it up
- 🗑️ dataset
- 🗑️ data
- 🗑️ provide
- 🗑️ falsify
- 🗑️ case
- 🗑️ co2
- 🗑️ conclusion
- 🗑️ claim
- 🗑️ timeline
- 🗑️ make
- 🗑️ weather
- 🗑️ lot
- 🗑️ stuff
- 🗑️ source
- 🗑️ cause
- 🗑️ warm
- 🗑️ exaggerate
- 🗑️ lot of
- 🗑️ i think they are exaggerating just how much human activity affects the climate
- 🗑️ reason
- 🗑️ increase
- 🗑️ cycle
- 🗑️ co2
- 🗑️ control
- 🗑️ greenhouse
- 🗑️ data
- 🗑️ take
- 🗑️ they even imply in the article that the earth is only 800k years old . " if we look at the whole 800,000 years of this earth's history . we never had such big greenhouse gas concentrations = of co2 , of methane , and of a lot of other gases , " he said .

Untangled Thematic-Forest View of Immigration Reddit Discussion



- deportation
- sense
- narrative
- think
- trump
- admin
- feel
- obama
- tsa
- bush
- wait
- lot
- obama
- people
- policy
- crime
- crosse
- number
- criminal
- border
- immigrant
- arrest
- clog
- catch
- court
- immigration
- immigrant
- issue
- deport
- way
- incompetent
- hardliner
- notable
- dem
- gop
- the fact that obama deported a notable number of immigrants seems to muddle the differences between the gop and dem side on this issue
- side
- difference
- number
- care
- fact
- muddle
- america
- people
- refugee
- deportation
- come
- children
- obama
- stop
- central
- american
- strategy
- prison
- conservative
- goal
- people
- assume
- make
- monster
- george
- wow the first time i got upvoted on this sub for saying obama had right wing policies
- right
- time
- wing
- policy
- upvote
- love
- fix
- tax
- code
- reform
- fixed inefficiencies by reforming the tax code
- inefficiency
- reality
- run

Model Results

Model	Precision	Recall	F-Score
Balanced Training Data (6926 Conversations)			
Decision Tree (5 features): 10-fold c.v.	0.77	0.69	0.73
Decision Tree (13 features): 10-fold c.v.	0.79	0.68	0.73
Random Forest (5 features): 10-fold c.v.	0.71	0.67	0.69
Random Forest (13 features): 10-fold c.v.	0.74	0.70	0.72
Imbalanced Real-World Data (40 Conversations)			
Decision Tree-5 (top 1 parent cand.)	0.14	0.14	0.14
Decision Tree-5 (top 10 parent cand.)	0.06	0.45	0.11
Decision Tree-13 (top 1 parent cand.)	0.16	0.16	0.16
Decision Tree-13 (top 10 parent cand.)	0.07	0.46	0.12
Random Forest-5 (top 1 parent cand.)	0.12	0.12	0.12
Random Forest-5 (top 10 parent cand.)	0.07	0.32	0.11
Random Forest-13 (top 1 parent cand.)	0.16	0.16	0.16
Random Forest-13 (top 10 parent cand.)	0.06	0.45	0.10
Precision Query (top 1 parent cand.)	0.87	0.04	0.08
Precision Query (top 10 parent cand.)	0.81	0.05	0.08
Recall Query (top 1 parent cand.)	0.27	0.28	0.28
Recall Query (top 10 parent cand.)	0.12	0.38	0.18
Content Query	0.36	0.29	0.32
Content Query (threads with 30 msgs)	0.56	0.48	0.51
Content Query (threads with 10 msgs)	0.70	0.66	0.68

Table 2: Summary of different model results.

Overview of the Related Work

Ref.	U/S*	Algorithm	Prec.	Rec.	F-sc.	Acc.	Characteristics
[9]	U	graph-based	-	-	0.7	-	long messages (avg > 60 words) educational discussions
[4]	U	SMSS	0.524	0.524	0.524	-	long messages (avg > 70 words) manually annotated data
[10]	U	similarity matching	-	0.8739	-	-	reliable feature (<i>quotes</i>) e-mails short threads (avg three e-mails)
[6]	S	Decision Tree	0.8307	0.6638	0.7379	-	reliable feature (only one feature: <i>reference to author's name</i>) manually annotated data short threads (4-comment threads)
[1]	S	Decision Tree	0.939	0.918	0.928	-	reliable feature (79.7% of the replies have a <i>distance</i> of 1) balanced training dataset 3-40 posts per thread
[7]	S	Ranking SVM	-	0.9617	-	-	reliable feature (<i>quotes</i> as one of the main features) e-mails short threads (at least three e-mails)
[2]	S	SORTS: Ranking SVM + candidate filtering	0.5264	0.5264	0.5264	-	long messages (avg 63.4 words)
[3]	S	PPC + Ranking SVM	-	-	-	0.970	e-mails short threads (avg 6-12 e-mails)
[5]	S	threadCRF	-	-	-	0.635	reliable feature (<i>reference to author's name,</i> <i>person resolution</i>)
[8]	S	threadCRF	-	-	-	-	uses own set of metrics short threads (avg 6 messages)

Table 1: Summary of algorithms which are used to reconstruct the reply-relation structure. Listed are the **best evaluation results** of each paper, and the reasons, why these results could be achieved. The best performance for forum data is reached by [1], using Decision Tree algorithm. (* U-unsupervised, S-supervised, Prec.-precision, Rec.-recall, F-sc.-F-score, Acc.-accuracy)

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