

Debrief by Tao Chen Feb 27, 2015

Austin, Texas, USA



Texas: The Lone Star State



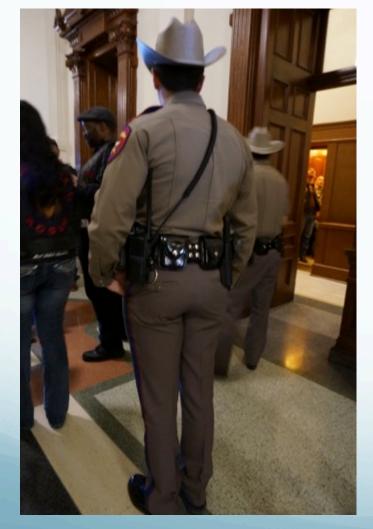
"YOU MAY ALL GO TO HELL, AND I WILL GO TO TEXAS" DAVY CROCKETT

Before I went





When I was there







Texas State Capitol



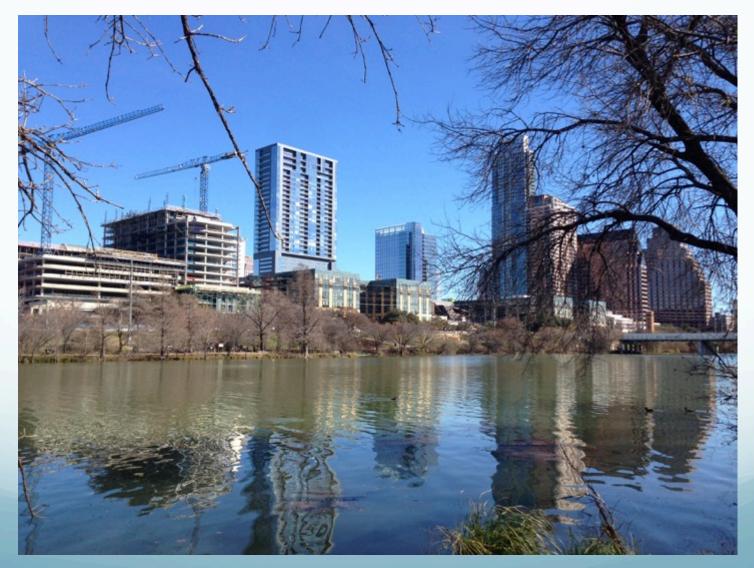


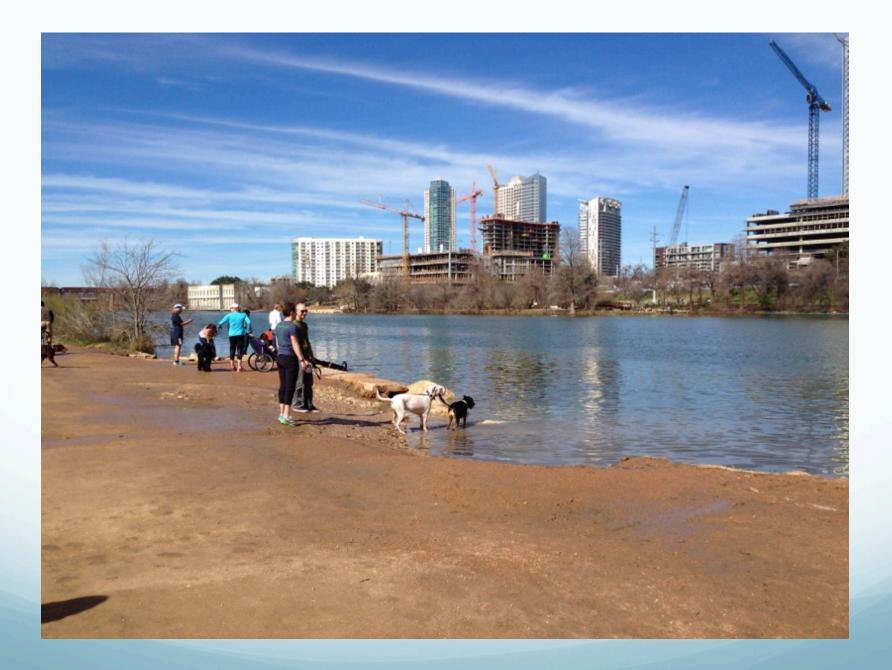






Colorado River

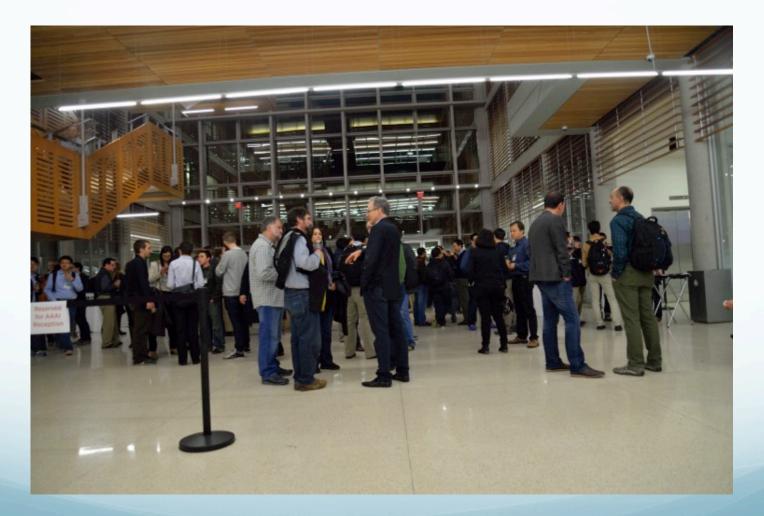




University of Texas, Austin



Reception at UT, Austin



Big Picture of AAAI

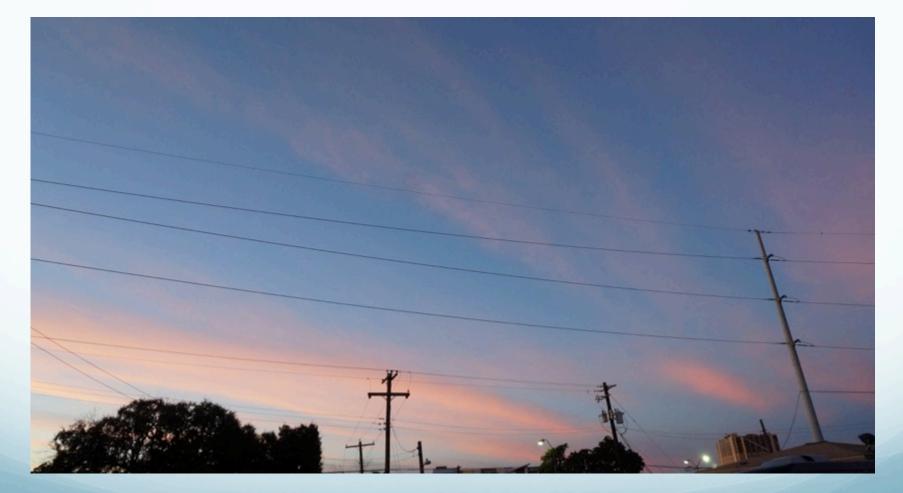


- Information about main technical track
 - 1991 submissions (1406 submission in AAAI-14)
 - 539 accepted papers (=27% acceptance rate)
 - AAAI-15 is 5.5 days (one day longer than AAAI-14)
 - First winter AI conference
- Tracks
 - AI and the Web (7 sessions)
 - Natural Language Processing (4 sessions)
 - Machine Learning (9 sessions)
 - Vision (3 sessions)
 - Traditional AI: Cognitive Systems, Computational Sustainability, Game Theory, Multiagent Systems, etc



https://twitter.com/maidylm/status/560542250195619840

Tight Schedule: 8:30am – 8:30pm



Talks Given by Senior Members





- Senior Member Blue Sky Talks
- What's Hot Talks
- Classic Paper Talk
- Panel Discussions

Breakfast with Champions





Lunch with an AAAI Fellow

Murray Campbell, Father of Deep Blue



Robots are everywhere!



Best Papers

- Outstanding Paper
 - "From Non-Negative to General Operator Cost Partitioning"
- Outstanding Paper Honorable Mention
 - "Predicting the Demographics of Twitter Users from Website Traffic Data". Aron Culotta, Nirmal Kumar Ravi and Jennifer Cutler, Illinois Institute of Technology

- Outstanding Student Paper
 - "Surpassing Human-Level Face Verification Performance on LFW with GaussianFace"

 Create a distantly labeled dataset, instead of using manually labeled dataset

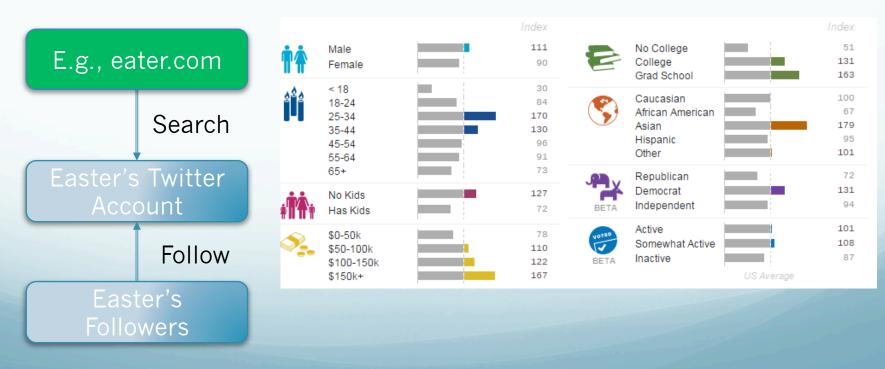
quantcast

51 111No College Male E.g., eater.com 131 College Female 90 Grad School 163 30 < 18 100 Caucasian 18-24 84 African American 67 25-34 170 179 Asian 35-44 130 Hispanic 95 45-54 96 101 Other 55-64 91 65+ 73 Republican 72 Democrat 131 127 No Kids 94 Independent 72 BETA Has Kids Active 101 \$0-50k 78 Somewhat Active 108 110 \$50-100k 87 Inactive \$100-150k 122 BETA 167 \$150k+

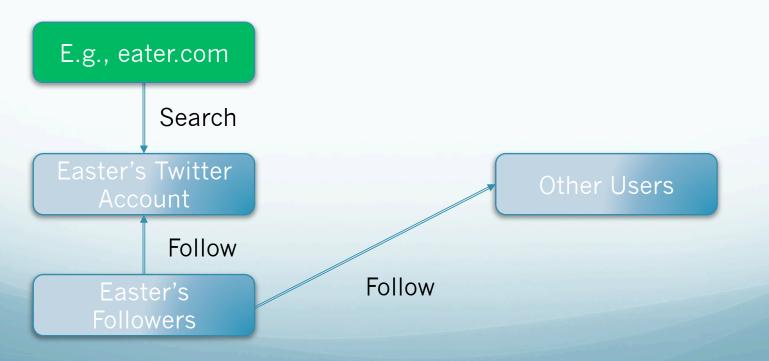
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E.g., eater.com	† †	Male Female	Index 111 90	No Colle College Grad So		Index 51 131 163
Search Easter's Twitter Account	4 ⁴ 4	< 18 18-24 25-34 35-44 45-54 55-64	30 84 170 130 96 91	Caucas African Asian Hispani Other	American	100 67 179 95 101
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	.	\$0-50k \$50-100k \$100-150k \$150k+	78 110 122 167	BETA Active Somewing Inactive	hat Active US Average	101 108 87

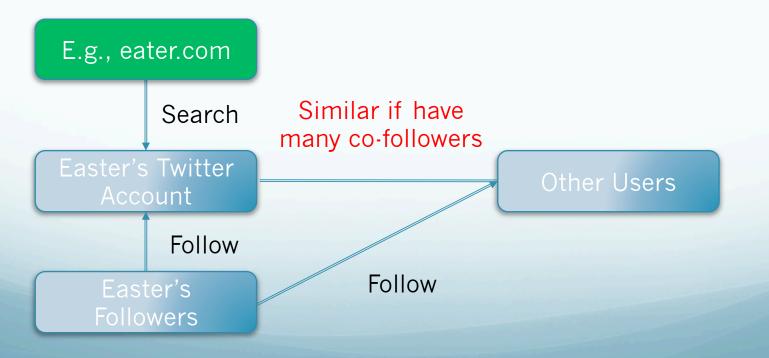
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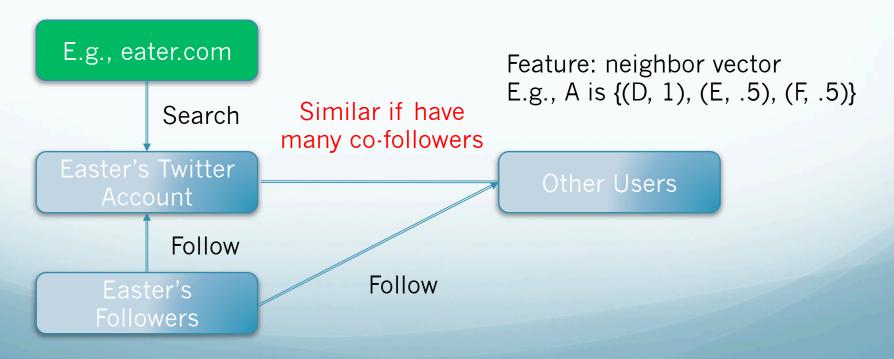
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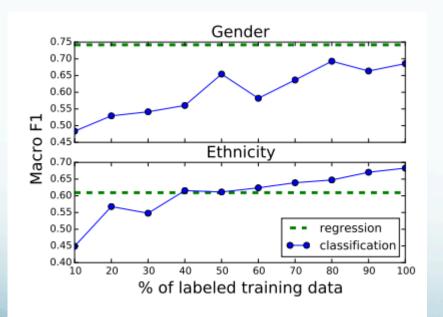
• 6 variables: gender, age, income, education, children, ethnicity

• Regression using both L1 and L2 regularizer

$$\beta^* \leftarrow \operatorname{argmin}_{\beta} \sum_{j=1}^{M} \frac{1}{N_j} \sum_{i=1}^{N_j} (y_i^{(j)} - \beta^{(j)T} \mathbf{x}_i^{(j)})^2 + \lambda_1 \sum_{k=1}^{p} ||\beta_k||_1 + \lambda_2 ||\beta||_2^2$$

- Evaluation 1: correlation coefficient between the predicted and true demographic variables
 - E.g., predict 30% is female, and quantcase says 40% is female
 - Overall correlation is very strong: 0.77 on average

- Evaluation 2: Macro-F1 for ethnicity and gender
- Manually labeled 615 users and trained a logistic regression classifier



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