

# Sell Out Project

## Informing Concert-Goers



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<http://18.221.223.30:3000/>



# Project Motivation

- Chicago is a premier destination for musical acts, both big and small
- Chicago's sheer population size means that even small bands can sell out venues
- Often people wait to buy tickets while trying to gauge interest from friends
- **Missing out on a concert during this period is a problem**

# Project Demo

<http://18.221.223.30:3000/>

# Data

- Eventbrite: a website containing information on all sorts of events, including music
- API provides:
  - Events Info: Names, Dates, Costs, Sold Out Status
  - Venues Info: Names, Locations, Capacity, Age Restrictions
  - Formats and Categories per Event

# Modeling and Success Criteria

- Logistic Regression: predicting whether an event will sell out
- Linear Regression: predicting how far in advance an event will sell out
- Modeling Success: 89% Cross Validation Accuracy for the Logistic Regression, ideally replicate over time with new data
- Business Success: Goal of Increased Click Rate on URLs for events which are predicted to sell out

# Insights

- Of the events that were predicted to sell out by the model (small n):
  - Majority located in the suburbs
  - Friday most common day
  - Venue capacity, listed age restrictions, price did not seem to play a major role

# Thank You

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[https://github.com/ElliotGardner/sell\\_out\\_project](https://github.com/ElliotGardner/sell_out_project)