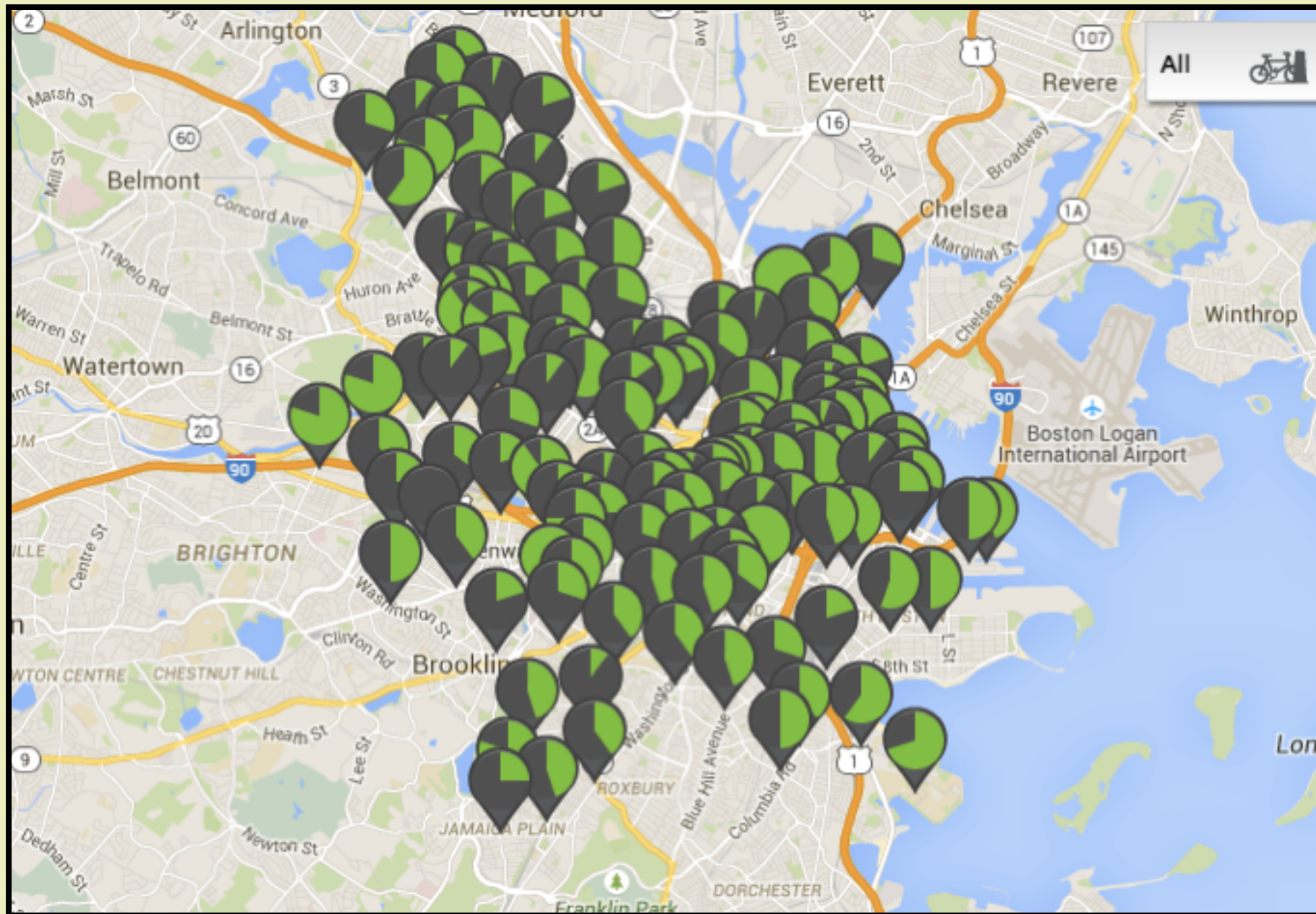


# Grow Hubway: Find the best location for new Hubway stations



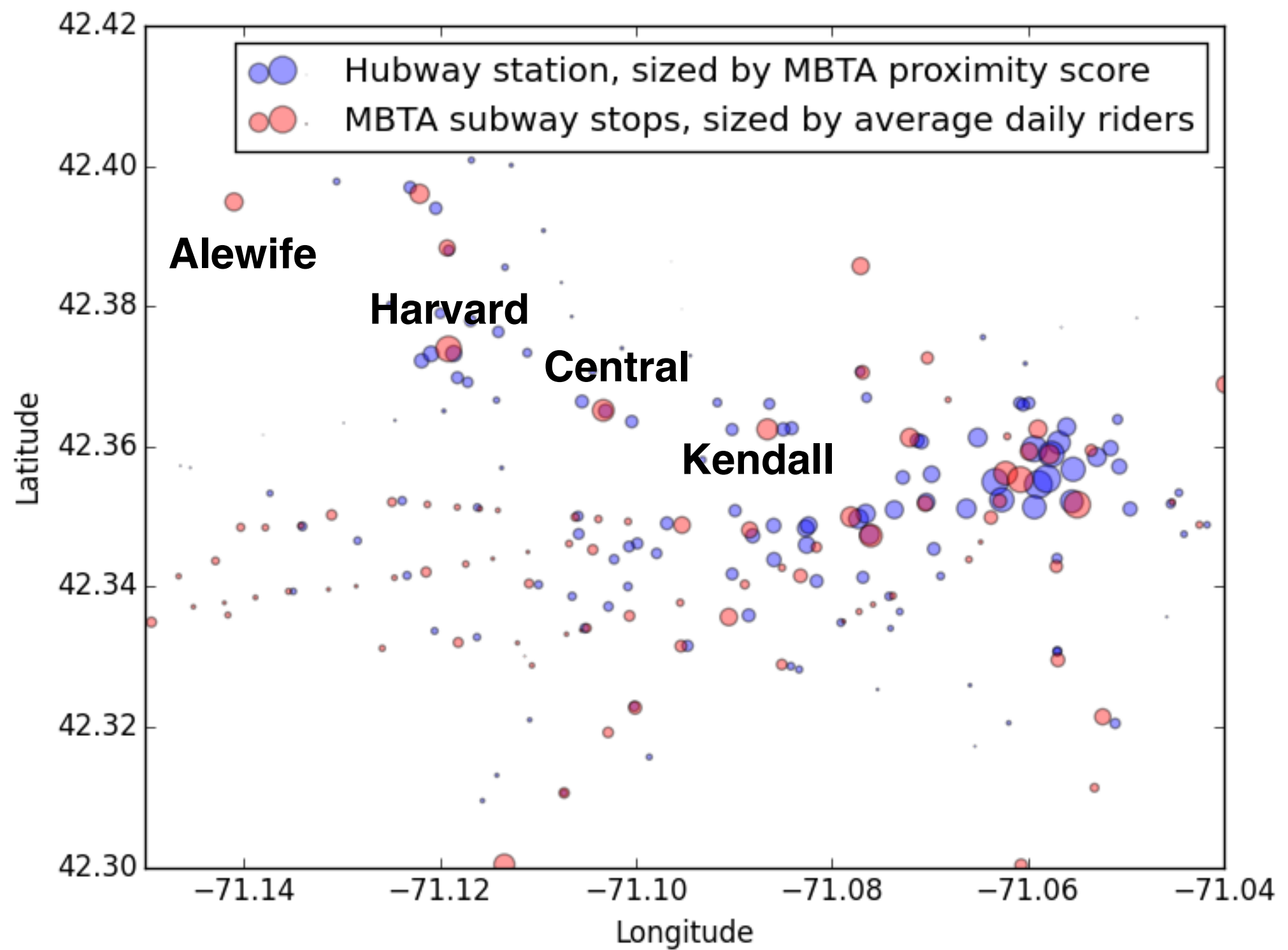
# Data

## Hubway Data

- July 2011 through November 2013
- Timestamp, start & end station, and duration for each trip
- ~140 stations

## Ancillary Data

- US Census:
  - Population size from 2010
  - Employee size from 2012 by zip code
- MBTA rider data from 2013
- Charles river coastline from OpenStreetMap



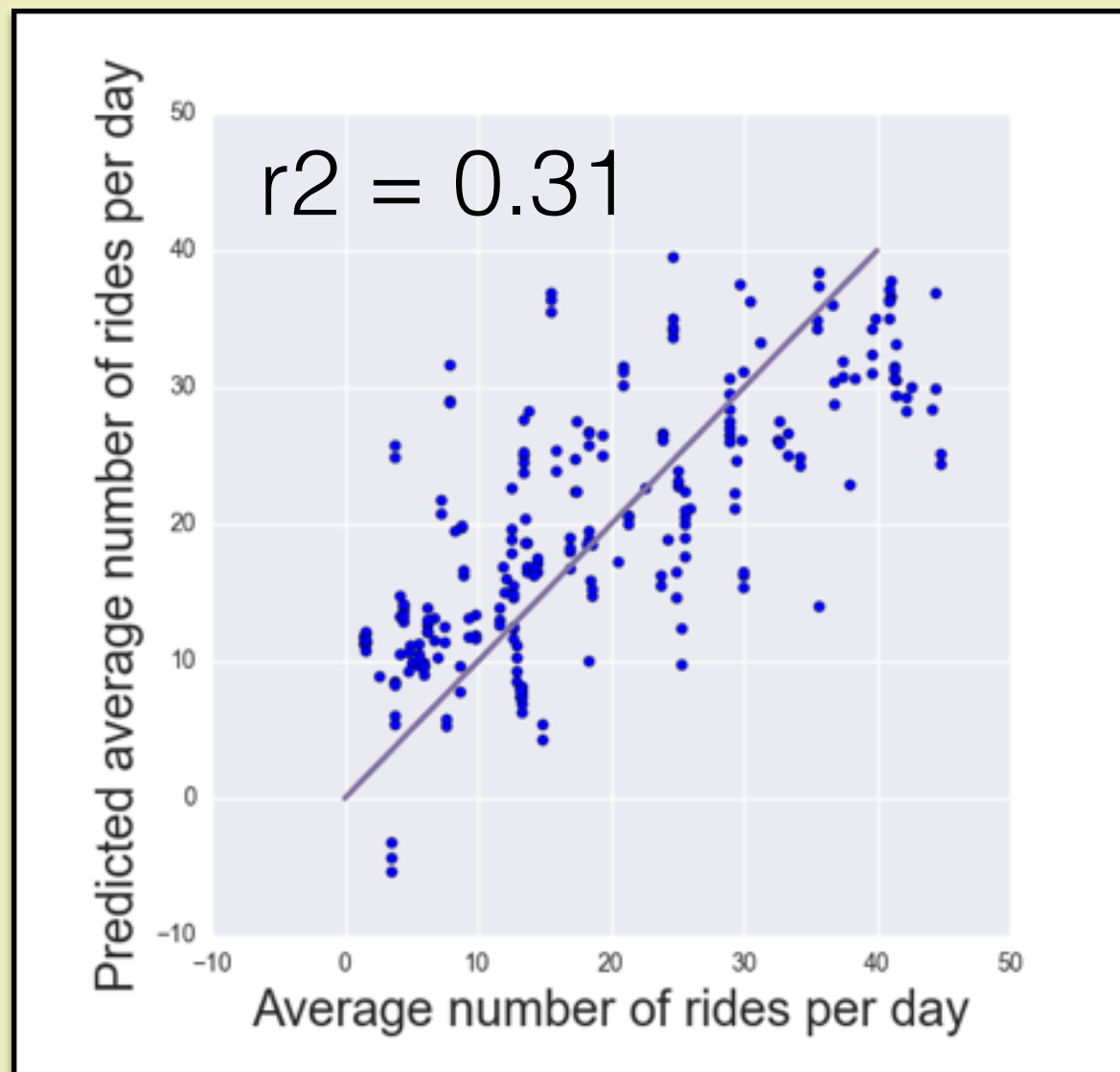
# Algorithmic Approach

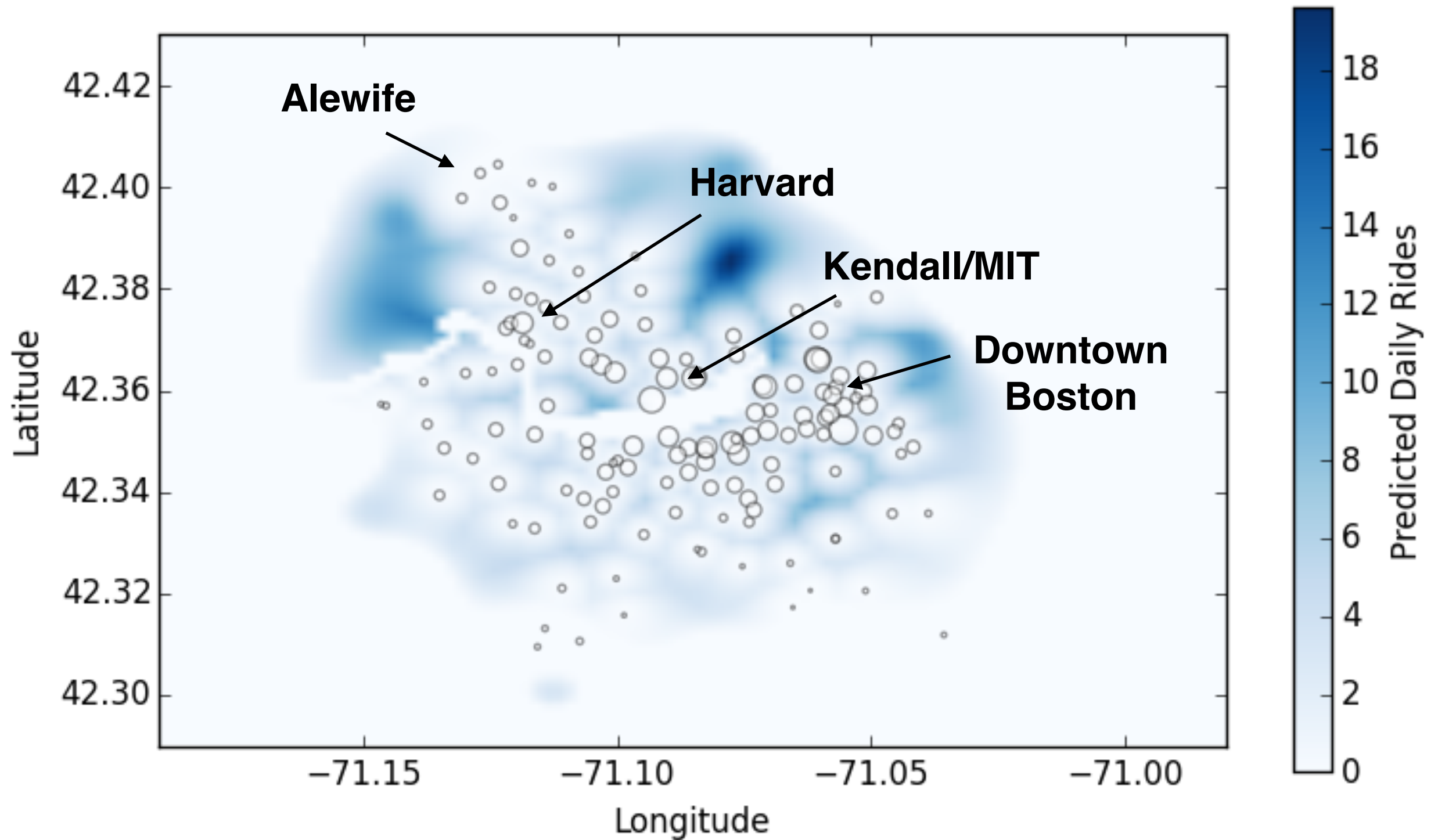
## Features

- Population score (US Census, 2010)
- Employee score (Tax data, 2012)
- MBTA subway score (2013)
- Origin and Destination

## Machine Learning approach

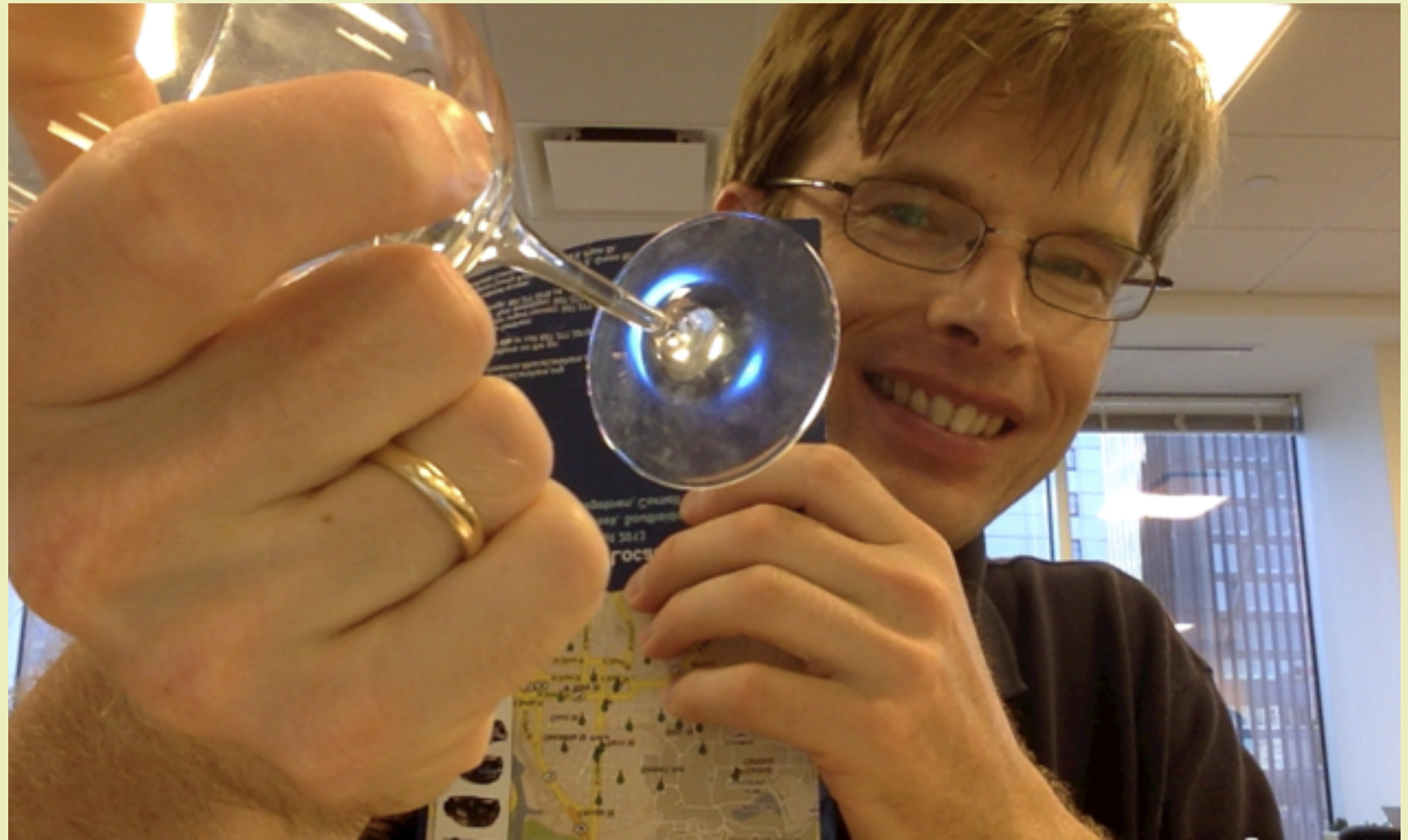
- Use linear regression to predict growth trend of a single Hubway station
- Validate using 5-fold cross-validation







# About Me



- PhD, Astronomy, University of Arizona, 2010
- Postdoc at Harvard-Smithsonian Center for Astrophysics
- Postdoc at Cornell University
- Research topic: understand how stars form in distant galaxies by studying gravitationally lensed galaxies

