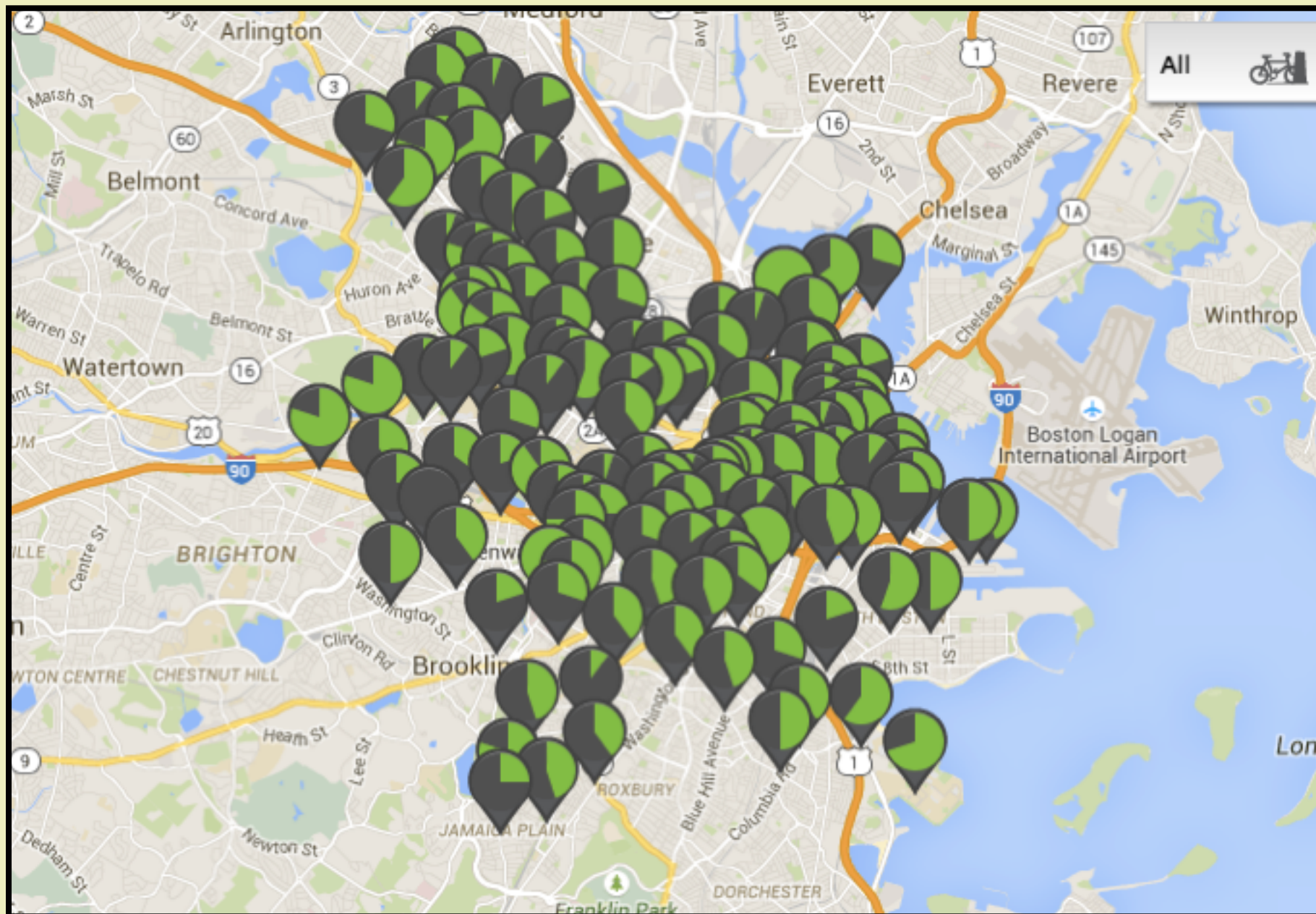


Grow Hubway: Where should Hubway expand next?



Grow Hubway: Where should Hubway expand next?



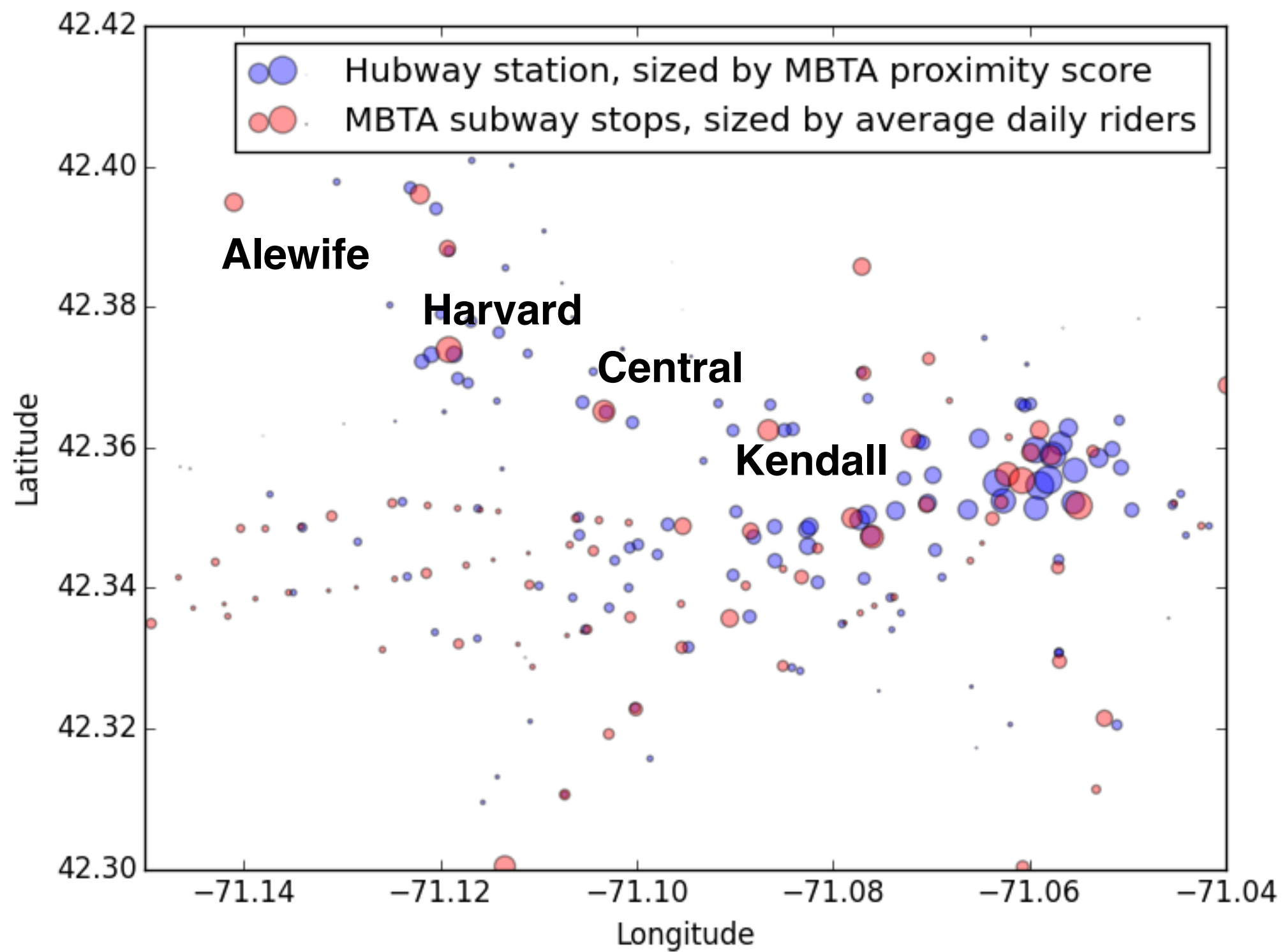
Data

Hubway Data

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

Ancillary Data

- US Census data by zip code
 - Population size from 2010
 - Employee size from 2012
- MBTA rider data from 2013
 - PDF scraping
 - <http://erikdemaine.org/maps/mbta/mbta.yaml>
- Mask for Charles river from OpenStreetMap data



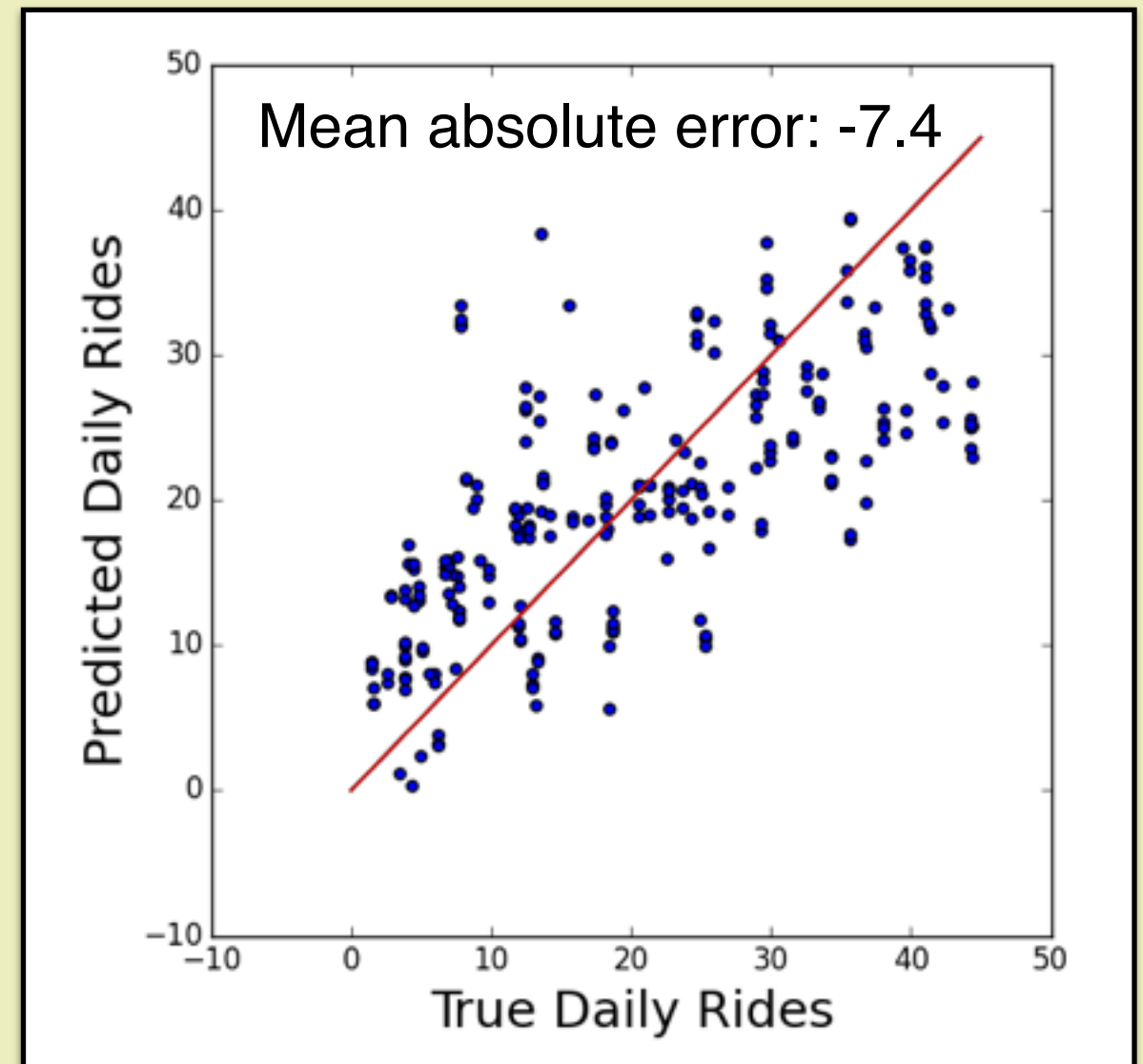
Algorithmic Approach

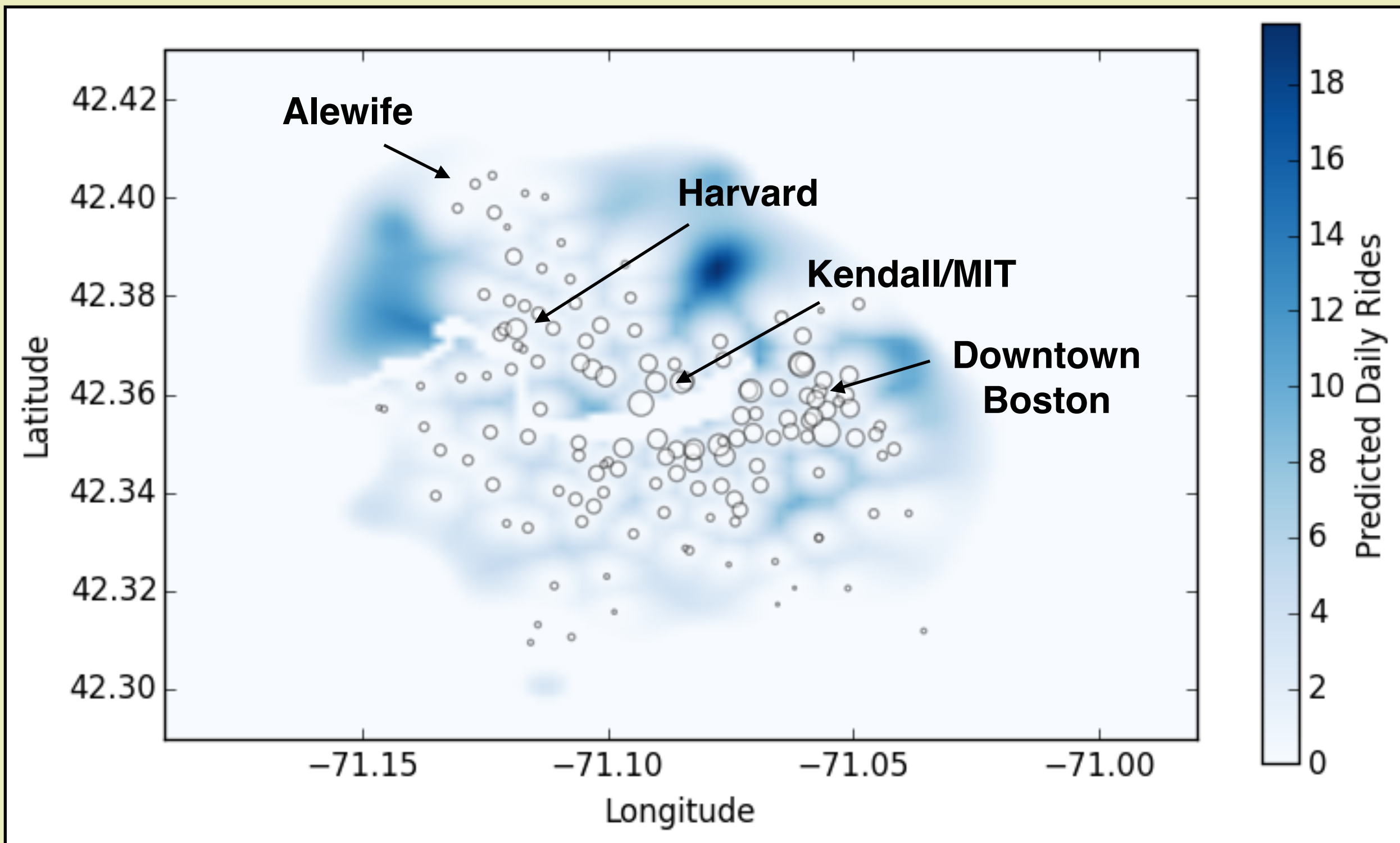
Features

- Population score
- Employee score
- MBTA subway score
- “origin” score and “destination” score for each of the above features
- Label: average daily rides

Machine Learning approach

- Linear regression
- 5-fold cross-validation
- prescription for cannibalism





- 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

**About
Me**

