Project Proposal for Connor Smith and Ognyan Moore

Citation information for the paper you want to reproduce

Quantifying crowd size with mobile phone and Twitter data

Federico Botta, Helen Susannah Moat, Tobias Preis R. Soc. open sci. 2015 2 150162; DOI: 10.1098/rsos.150162. Published 27 May 2015

Link to the paper and repository

Quantifying crowd size with mobile phone and Twitter data Data Repository

List of Descriptive Statistics

- Call and SMS Activity
- Internet Activity
- Twitter Activity
- Attendee Counts

List of the Analysis/Results

- Linear Relationships (ordinary least squares regression)
- P-Values for goodness of fit
- Spearman's nonparametric rank correlation

Propose at least one additional plot

- Variance against different days/same time for usage stats (compare 2 am across different days)
 - Reanalyze estimations using mean based on time of day/day of week?
- Attempt to find a standard "baseline" for the area sans large event (possibly using census data for the town?)