• Public opinion polls for the UK
• csv format (>400 data points)
• Time interval: 04/09/2010 -1/week-> 12/04/2011 -5/week-> now
• voting intention, government approval (all polls)
• parties & sensitive issues (e.g. Taxation, Education, Immigration)
• politician traits (e.g. Charismatic, Strong, Decisive) (forthnightly)
• current issues (e.g. EU membership, Scottish independence, Lybia)
• Everything split by: Voting intention, VI relative to last election vote, Sex (2), Age group (4), Social Grade (2), Region (5)
Results

- Forecasting polls using text regression from tweets
- Novel model of sparse bilinear regression
- Selects sparse set of both users and words

<table>
<thead>
<tr>
<th></th>
<th>CON</th>
<th>LAB</th>
<th>LBD</th>
<th>μ</th>
</tr>
</thead>
<tbody>
<tr>
<td>$B_\mu$</td>
<td>2.272</td>
<td>1.663</td>
<td>1.136</td>
<td>1.69</td>
</tr>
<tr>
<td>$B_{last}$</td>
<td>2</td>
<td>2.074</td>
<td>1.095</td>
<td>1.723</td>
</tr>
<tr>
<td>LEN</td>
<td>3.845</td>
<td>2.912</td>
<td>2.445</td>
<td>3.067</td>
</tr>
<tr>
<td>BEN</td>
<td>1.939</td>
<td>1.644</td>
<td>1.136</td>
<td>1.573</td>
</tr>
<tr>
<td>BGL</td>
<td>1.785</td>
<td>1.595</td>
<td>1.054</td>
<td>1.478</td>
</tr>
</tbody>
</table>

A User-centric Model of Voting Intention from Social Media

Bill Lampos, Daniel Preotiuc-Pietro, Trevor Cohn

ACL 2013 http://www.preotiuc.ro
Future plans

• poll prediction: regional and demographic
• prediction and features for the other time series (events, traits, issues)
• identifying events that affect variation in time series

e.g. 1) increase in 'Sticks to what he believes in' for PM David Cameron after E.U. veto (2011)
2) big drop in 'Education' for Lib-Dem party after university tax increases (2011)