Analysis and Visualization of Social Networks

Mary Elaine Malit

UofT Data Base Group,
Prof. Nick Koudas
June 17, 2013
What is Pinterest?

➢ Bulletin board
➢ Pin images
➢ Repin other pins
➢ Follow boards / users
Goals and Motivations

➢ **Goal 1:** Determine Boards or Pinners who are experts in a given topic

➢ **Goal 2:** Narrow down Pinterest's categories

➢ **Reasons:** Advertising platforms
Outline

➢ Current Work: Expertise and signals

➢ Other goals for the summer: Narrower categories and GUI
What makes an Expert?

- Collect data and calculate “signals”
- Signal: a numerical attribute of a user / board
- Combine signals and calculate score
What makes an Expert?

- Popularity
- Cohesiveness
- Suitability
- Dedication
Expertise: Popularity

➢ Signal 1: # followers per pin
➢ Signal 2: # comments / repins / likes per pin
➢ My Board: <0 0 * * * *>


Expertise: Cohesiveness

➢ Signal 3: % pins with description that match board name or category

➢ Signal 4: % repins that came from same category

➢ My Board: <0 0 0 0 * *>
Expertise: Suitability

➢ We don't want: Companies, mere repinners

➢ Signal 5: # of domains pins come from / #pins
Expertise: Dedication (Pinner)

- Signal 7: % of boards under given category
- Signal 8: # categories Pinner uses across all boards (the lower the better)
Score Calculation

➢ Vector: <0 0 0 0 1 0>

➢ Signals are weighted then added

➢ Final Score: 1

➢ It means my board is not an expert!
## Summer Plans: Narrow Topics

<table>
<thead>
<tr>
<th>Home Feed</th>
<th>Education</th>
<th>Men's Fashion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Popular</td>
<td>Film, Music &amp; Books</td>
<td>Outdoors</td>
</tr>
<tr>
<td>Everything</td>
<td>Food &amp; Drink</td>
<td>Photography</td>
</tr>
<tr>
<td><strong>For Dad</strong></td>
<td>Gardening</td>
<td>Products</td>
</tr>
<tr>
<td>Gifts</td>
<td>Geek</td>
<td>Quotes</td>
</tr>
<tr>
<td>Videos</td>
<td>Hair &amp; Beauty</td>
<td>Science &amp; Nature</td>
</tr>
<tr>
<td>Animals</td>
<td>Health &amp; Fitness</td>
<td>Sports</td>
</tr>
<tr>
<td>Architecture</td>
<td>History</td>
<td>Tattoos</td>
</tr>
<tr>
<td>Art</td>
<td>Holidays &amp; Events</td>
<td>Technology</td>
</tr>
<tr>
<td>Cars &amp; Motorcycles</td>
<td>Home Decor</td>
<td>Travel</td>
</tr>
<tr>
<td>Celebrities</td>
<td>Humor</td>
<td>Weddings</td>
</tr>
<tr>
<td>DIY &amp; Crafts</td>
<td>Illustrations &amp; Posters</td>
<td>Women's Fashion</td>
</tr>
<tr>
<td>Design</td>
<td>Kids</td>
<td></td>
</tr>
</tbody>
</table>
Conclusion

➢ We don't have results yet

➢ Follow my troll account!
Gathering Data

➢ No API? Have no fear; web crawler is here!
Summer Plans: Multi-level Searching

➢ Men's Fashion → Boots