The Structured Search Engine

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Google

January 19, 2011
Semantic
The Structured Search Engine

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Intelligent
The Structured Search Engine

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Decision
The Structured Search Engine

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Today

- Can we understand the world outside the web?
  → Freebase and Extraction

- Can we better understand queries?
  → Query parsing and Question Answering

- Can we better understand content?
  → Sentiment Analysis

- Can we make Google do the work for you?
  → Google Squared
Today

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January 2011

• 20M topics, >400M connections

• all publicly available
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**among objectives**
• make Freebase canonical reference point for entity topic data on the web

• > billion entities
entity schema
**Open-Domain Fact Extraction**

- Approach: lots of overlapping techniques with *high coverage, low precision*
  - Table extraction
  - "Clear prompts" (foo: bar)
  - Known value types (e.g. "depth" always takes a measurement of length)
  - Page segmentation
  - Wrapper induction

- Lots of machine learning
- Lots of evaluation
- Lots of iteration!
## Candidate Names

### Attributes

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer:</td>
<td>Sony</td>
</tr>
<tr>
<td>Part number:</td>
<td>SS-F7000</td>
</tr>
<tr>
<td>Phone:</td>
<td>1-877-865-SONY</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:contact@sel.sony.com">contact@sel.sony.com</a></td>
</tr>
<tr>
<td>Fax:</td>
<td>941-768-7790</td>
</tr>
<tr>
<td>Weight:</td>
<td>33.1 lbs</td>
</tr>
<tr>
<td>Max (RMS) Output Power (Total):</td>
<td>180 Watt</td>
</tr>
<tr>
<td>Response Bandwidth:</td>
<td>35 - 50000 Hz</td>
</tr>
<tr>
<td>-3dB Frequency Response:</td>
<td>35 - 50000 Hz</td>
</tr>
<tr>
<td>Input Impedance:</td>
<td>8 Ohm</td>
</tr>
<tr>
<td>Sensitivity:</td>
<td>90 dB</td>
</tr>
<tr>
<td>Magnetic Shield:</td>
<td>Yes</td>
</tr>
<tr>
<td>Connectivity Technology:</td>
<td>Wired</td>
</tr>
<tr>
<td>Recommended Placing:</td>
<td>Floor-standing</td>
</tr>
<tr>
<td>Detachable Grilles:</td>
<td>Yes</td>
</tr>
<tr>
<td>Width:</td>
<td>11.4 in</td>
</tr>
<tr>
<td>Depth:</td>
<td>11.9 in</td>
</tr>
<tr>
<td>Height:</td>
<td>41.9 in</td>
</tr>
<tr>
<td>System Components:</td>
<td>2 speakers</td>
</tr>
<tr>
<td>Speaker Type:</td>
<td>4-way - Passive</td>
</tr>
<tr>
<td>Average user rating:</td>
<td>4.5 stars out of 2 reviews</td>
</tr>
<tr>
<td>My rating:</td>
<td>0 stars</td>
</tr>
</tbody>
</table>

*Show/hide low confidence attributes*
Show/hide low confidence attributes
- Pros: accurate 4-way design
- Cons: "Sony" name will run off most persnickety audiophiles
- Right/left channel speaker: 1 x Midrange driver - 3.25 in.
- Right/left channel speaker: 2 x Wofer driver - 8 in
- Sort by: Most helpful Highest rating Lowest rating Most recent
- Ships: Today
- out: 2
- rating: 5
- Average: 5
- Average: 4
- Average: 5
- Average: 4
- reviews: 5
- reviews: 4
- reviews: 5
- reviews: 4
- out: 2
- Showing: 1
- out: 2
- out: 10
- out: 1
- Updated on: Aug 28, 2009
- Updated: Aug 28, 2009
- Showing: 1
- out: 2
- lbs: 0

useful threshold?