Leveraging cloud based technologies to talk to robots

QuickTalk plugin
The Realistic Avatar Interface
Interaction Time

Input time

Response generation time

participant query

speech recognition

text response

utterance generation delay

utterance production

FAILURE
<table>
<thead>
<tr>
<th>Category</th>
<th>Quality metric</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Functionality</strong></td>
<td>• Executes requested tasks</td>
</tr>
<tr>
<td></td>
<td>• Accuracy of output</td>
</tr>
<tr>
<td></td>
<td>• General ease of use</td>
</tr>
<tr>
<td><strong>Humanity</strong></td>
<td>• Convincing</td>
</tr>
<tr>
<td></td>
<td>• satisfying</td>
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<tr>
<td></td>
<td>• natural interaction</td>
</tr>
<tr>
<td><strong>Affect</strong></td>
<td>• Make tasks more interesting and fun</td>
</tr>
<tr>
<td><strong>Ethics and behaviour</strong></td>
<td>• Trustworthiness</td>
</tr>
</tbody>
</table>
Seriousness of the interface

Likelihood of use in the future

Consistency of the display

Seriousness of the interface

Ease of use

Error bars: SD ± 1
Response time by interface

User satisfaction with response time

Error bars: SD± 1
How fun the interface is

Error bars: SD ± 1
Query failure rate

Input time

User perceived accuracy

User satisfaction with response

Error bars : SD ± 1