FC-DCNN: A densely connected neural network for stereo estimation

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Method
- hybrid stereo estimation method
- lightweight disparity estimation network
- own post-processing

Network is trained using corresponding (\(s_+\)) and non-corresponding (\(s_-\)) image patches extracted from the left and right image respectively.

\[
\text{loss} = \text{ReLU}(s_+ - s_- - 0.2)
\]

Total trainable parameter comparison between our method and other popular stereo estimation networks.

<table>
<thead>
<tr>
<th>Method</th>
<th>Param</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC-DCNN (ours)</td>
<td>0.37M</td>
</tr>
<tr>
<td>MC-CNN-ACRT</td>
<td>0.5M</td>
</tr>
<tr>
<td>GC-Net</td>
<td>2.9M</td>
</tr>
<tr>
<td>PSMNet</td>
<td>3.5M</td>
</tr>
</tbody>
</table>

Results
- Qualitative results on test images
- Quantitative results

For more information and all the source code visit:
https://github.com/thedodo/FC-DCNN