**Content Based Mode and Depth Skipping with Sharp and Directional Edges for Intra Coding in Screen Content Coding**

**Background•Target**
- Compression Standard: HEVC
  - for Natural Videos
- Screen Content Coding
  - for Screen Videos

**Problem•Solution**
- In conventional works
  - Sharp edge content is not utilized
  - Complexity reduction for general screen video is not enough

- **Content based complexity reduction**

**Concept of the proposal**

**Content based Mode & Depth Skipping**

(1) Sharp Edge based Classification (SEBC)
- Blocks are classified based on Sharp Edge feature

(2) Directional Edge based Classification (DEBC)
- Classified based on Directional Edge feature

**Encoding Result**

<table>
<thead>
<tr>
<th>Method</th>
<th>BD-bitrate [%]</th>
<th>Time Saving [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEBC</td>
<td>2.25</td>
<td>10.0</td>
</tr>
<tr>
<td>SEBC + DEBC</td>
<td>1.91</td>
<td>10.8</td>
</tr>
</tbody>
</table>

**Experimental Result**

- This approach is effective for videos with large text region

**Conclusion**

- By Content Base Approach, over 10% Time Saving is achieved in the Screen Content Coding encoder