**Visual Quality Improvements for H3D and 2D Content**

To validate the cost-effectiveness claim (important criteria in our project), mitigating the hardware limitations through software tools became primordial. The H3D imaging framework, which is currently using commercial cameras, suffers from the low spatial density of commercial CMOS sensors. We have developed a framework based on image super-resolution and video motion interpolation to mitigate these limitations. The 360-video scenario is our primary focus. We are using still captures of 40 megapixels spaced by 5° (72 pictures for complete 360). The in-between frames are then computed by a deep-learning based approach, mainly intended to enhance the smoothness of the playback (increased from 5FPS to 120 FPS) with minimal glitches.

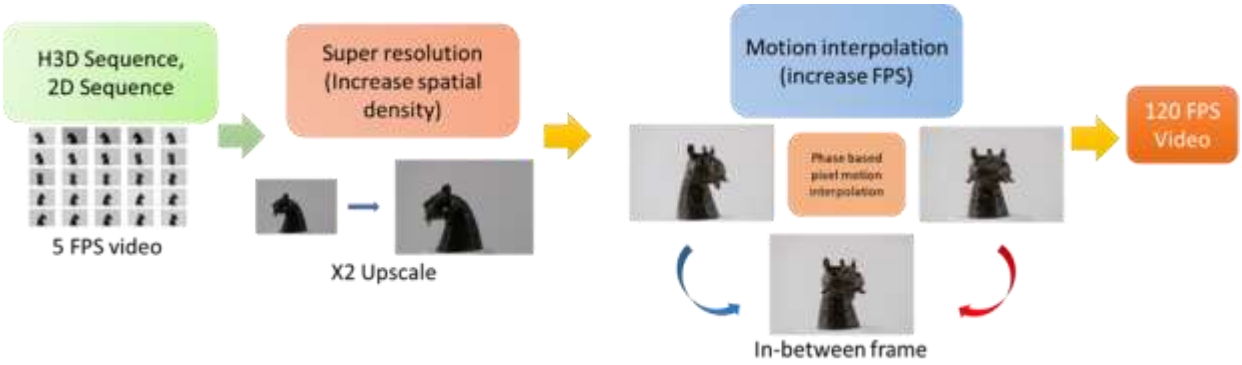


Figure 4. Visual Content post-processing frameworks

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