

## **ADOPTED CONTRIBUTIONS TO INTERNATIONAL STANDARDS – Nam Ling**

### **(1) NORMATIVE CONTRIBUTIONS ADOPTED:**

1. Jianhua Zheng, Zhouye Gu, Xu Chen, Xiaozhen Zheng, Yongbing Lin, Nam Ling, and Philipp Zhang, “Cleanup of Single Depth Intra Mode Simplification,” JCT3V-K0051, adopted at the *11th Meeting of Joint Collaborative Team on 3D Video Coding Extensions (JCT-3V) of ITU-T SG 16 WP 3 and ISO/IEC JTC 1/SC 29/WG 11*, Geneva, Switzerland, February 12 – 18, 2015.  
(The method was adopted into the 3D-HEVC video coding international standard – including the 3D-HEVC text document and the *3D-HEVC reference software HTM 14.0* onwards. Our method further simplifies the single depth intra mode.)
2. Zhouye Gu, Jianhua Zheng, Nam Ling, and Philipp Zhang, “3D-CE5 related: On Neighbouring Reference Pixel Selection for Depth Intra Coding,” JCT3V-G0143, adopted at the *7th Meeting of Joint Collaborative Team on 3D Video Coding Extension Development (JCT-3V) of ITU-T SG 16 WP 3 and ISO/IEC JTC 1/SC 29/WG 11*, San Jose, California, U.S.A, January 9 – 17, 2014.  
(The method was adopted into the 3D-HEVC video coding international standard – including the 3D-HEVC text document JCT3V-G1005 and the *3D-HEVC reference software HTM 10.0* onwards. Our method improves reference pixel selection for depth intra coding in 3D-HEVC.)

### **(2) INFORMATIVE CONTRIBUTIONS ADOPTED:**

3. Zhouye Gu, Jianhua Zheng, Nam Ling, and Philipp Zhang, “Fast Intra SDC Coding for 3D-HEVC Intra Coding,” JCT3V-I0123, adopted at the *9th Meeting of Joint Collaborative Team on 3D Video Coding Extension Development (JCT-3V) of ITU-T SG 16 WP 3 and ISO/IEC JTC 1/SC 29/WG 11*, Sapporo, Japan, July 3 – 9, 2014.  
(The method was adopted into the 3D-HEVC video coding international standard – including the *3D-HEVC reference software HTM 12.0* onwards. Our method speeds up 3D-HEVC depth intra coding.)
4. Zhouye Gu, Jianhua Zheng, Nam Ling, and Philipp Zhang, “VSD Bugfix and Improvement,” JCT3V-G0163, adopted at the *7th Meeting of Joint Collaborative Team on 3D Video Coding Extension Development (JCT-3V) of ITU-T SG 16 WP 3 and ISO/IEC JTC 1/SC 29/WG 11*, San Jose, California, U.S.A, January 9 – 17, 2014.  
(The method was adopted into the 3D-HEVC video coding international standard – including the *3D-HEVC reference software HTM 10.0* onwards. Our method corrects view synthesis distortion calculation in 3D-HEVC.)
5. Zhouye Gu, Jianhua Zheng, Nam Ling, and Philipp Zhang, “3D-CE5.h related: Fast Intra Prediction Mode Selection for Intra Depth Map Coding,” JCT3V-E0238, adopted at the *5th Meeting of Joint Collaborative Team on 3D Video Coding Extension Development (JCT-3V) of ITU-T SG 16 WP 3 and ISO/IEC JTC 1/SC 29/WG 11*, Vienna, Austria, July 27 – August 2, 2013.  
(The method was adopted into the 3D-HEVC video coding international standard – including the *3D-HEVC reference software HTM 8.0* onwards. Our method simplifies the mode decision process on 3D-HEVC depth intra coding.)
6. Jun Zhang, Xiaoquan Yi, Nam Ling, and Weijia Shang, “Context Adaptive Lagrange Multiplier (CALM) for Motion Estimation in JM – Improvement,” JVT-T046, adopted at the *20th Meeting of Joint Video Team (JVT) of ISO/IEC MPEG & ITU-T VCEG*, Klagenfurt, Austria, July 17 – 21, 2006.  
(The method was adopted into the H.264/MPEG-4 AVC video coding international standard – including the text document and the *H.264/AVC reference software JM 12.0* onwards. Our method further improves the rate-distortion performance for fast motion estimation.)
7. Xiaoquan Yi, Jun Zhang, Nam Ling, and Weijia Shang, “Improved and simplified fast motion estimation for JM,” JVT-P021, adopted at the *16th Meeting of Joint Video Team (JVT) of ISO/IEC MPEG & ITU-T VCEG*, Poznan, Poland, July 24-29, 2005.  
(The method was adopted into the H.264/MPEG-4 AVC video coding international standard – including the *Text Description of Joint Model Reference Encoding Methods and Decoding Concealment Methods* and the

*H.264/AVC reference software JM 10.0* onwards. Ours is one of the very few fast motion estimation methods in the H.264 reference software.)