

A Novel Fast CU Encoding Scheme Based on Spatiotemporal Inter Coding

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Inter-prediction optimisations for fast HEVC encoding of ultra high definition content. , 2015, , .		3
2	A Fast CU Decision Algorithm for MV-HEVC. , 2015, , .		2
3	Merge mode based fast inter prediction for HEVC. , 2015, , .		1
4	Low Complexity HEVC Encoder for Visual Sensor Networks. Sensors, 2015, 15, 30115-30125.	3.8	14
5	A fast Coding Tree Unit depth Prediction for HEVC. , 2015, , .		1
6	Biological characteristic online identification technique over 5G network. IEEE Wireless Communications, 2015, 22, 84-90.	9.0	9
7	A fast CU encoding scheme based on the joint constraint of best and second-best PU modes for HEVC inter coding. , 2015, , .		1
8	Fast prediction unit partition mode selection for high-efficiency video coding intercoding using motion homogeneous coding units. Journal of Electronic Imaging, 2015, 24, 063024.	0.9	0
9	Fast HEVC Inter CU Decision Based on Latent SAD Estimation. IEEE Transactions on Multimedia, 2015, 17, 2147-2159.	7.2	72
10	Fast Motion Estimation Based on Content Property for Low-Complexity H.265/HEVC Encoder. IEEE Transactions on Broadcasting, 2016, 62, 675-684.	3.2	195
11	Simultaneous encoder for high-dynamic-range and low-dynamic-range video. IEEE Transactions on Consumer Electronics, 2016, 62, 420-428.	3.6	11
12	A Framework of Complexity Optimally Scalable Algorithms for HEVC. , 2016, , .		1
13	Texture-based fast CU size decision algorithm for HEVC intra coding. , 2016, , .		7
14	A general effective rate control system based on matching measurement and inter-quantizer. Information Sciences, 2016, 346-347, 351-368.	6.9	3
15	Computation Reduction in Transform Unit of High Efficiency Video Coding Based on Zero-Coefficients. , 2016, , .		4
16	Quadtree Degeneration for HEVC. IEEE Transactions on Multimedia, 2016, 18, 2321-2330.	7.2	16
17	HEVC encoder optimisations using adaptive coding unit visiting order. , 2016, , .		1
18	Fast H.264/AVC to HEVC transcoder based on data mining and decision trees. , 2016, , .		10

#	ARTICLE	IF	CITATIONS
19	A fast inter coding algorithm for HEVC based on texture and motion quad-tree models. Signal Processing: Image Communication, 2016, 47, 271-279.	3.2	11
20	Computational complexity allocation and control for inter-coding of high efficiency video coding with fast coding unit split decision. Journal of Visual Communication and Image Representation, 2016, 40, 34-41.	2.8	5
21	DPPDL: A Dynamic Partial-Parallel Data Layout for Green Video Surveillance Storage. IEEE Transactions on Circuits and Systems for Video Technology, 2018, 28, 193-205.	8.3	42
22	An All-Zero Block Detection Scheme for Low-Complexity HEVC Encoders. IEEE Transactions on Multimedia, 2016, 18, 1257-1268.	7.2	27
23	Fast algorithm for the High Efficiency Video Coding (HEVC) encoder using texture analysis. Information Sciences, 2016, 364-365, 72-90.	6.9	25
24	A CU-Level Rate and Distortion Estimation Scheme for RDO of Hardware-Friendly HEVC Encoders Using Low-Complexity Integer DCTs. IEEE Transactions on Image Processing, 2016, 25, 3787-3800.	9.8	12
25	Inter-Prediction Optimizations for Video Coding Using Adaptive Coding Unit Visiting Order. IEEE Transactions on Multimedia, 2016, 18, 1677-1690.	7.2	26
26	Efficient Bit Rate Transcoding for High Efficiency Video Coding. IEEE Transactions on Multimedia, 2016, 18, 364-378.	7.2	28
27	Low-Complexity Intra-Coding Scheme for HEVC. Circuits, Systems, and Signal Processing, 2016, 35, 4331-4349.	2.0	4
28	Neyman-Pearson-Based Early Mode Decision for HEVC Encoding. IEEE Transactions on Multimedia, 2016, 18, 379-391.	7.2	48
29	Pareto-Based Method for High Efficiency Video Coding With Limited Encoding Time. IEEE Transactions on Circuits and Systems for Video Technology, 2016, 26, 1734-1745.	8.3	23
30	Fast inter-prediction mode decision algorithm for HEVC. Signal, Image and Video Processing, 2017, 11, 33-40.	2.7	14
31	HEVC coding-unit decision algorithm using tree-block classification and statistical data analysis. Multimedia Tools and Applications, 2017, 76, 9051-9072.	3.9	4
32	Energy-aware scheme for the 3D-HEVC depth maps prediction. Journal of Real-Time Image Processing, 2017, 13, 55-69.	3.5	6
33	Unimodal Stopping Model-Based Early SKIP Mode Decision for High-Efficiency Video Coding. IEEE Transactions on Multimedia, 2017, 19, 1431-1441.	7.2	31
34	Spatial/temporal motion consistency based MERGE mode early decision for HEVC. Journal of Visual Communication and Image Representation, 2017, 44, 198-213.	2.8	18
35	Bayesian adaptive algorithm for fast coding unit decision in the High Efficiency Video Coding (HEVC) standard. Signal Processing: Image Communication, 2017, 56, 1-11.	3.2	6
36	Information fusion based techniques for HEVC., 2017, , .		4

#	ARTICLE	IF	CITATIONS
37	Adaptive Inter CU Depth Decision for HEVC Using Optimal Selection Model and Encoding Parameters. IEEE Transactions on Broadcasting, 2017, 63, 535-546.	3.2	25
38	uAVS2â€™Fast encoder for the 2nd generation IEEE 1857 video coding standard. Signal Processing: Image Communication, 2017, 53, 13-23.	3.2	1
39	Fast HEVC inter prediction algorithm based on spatio-temporal block information. , 2017, , .		5
40	Binary and Multi-Class Learning Based Low Complexity Optimization for HEVC Encoding. IEEE Transactions on Broadcasting, 2017, 63, 547-561.	3.2	70
41	Video Encoder Architecture for Low-Delay Live-Streaming Events. IEEE Transactions on Multimedia, 2017, 19, 2252-2266.	7.2	5
42	A fast inter-frame encoding scheme using the edge information and the spatiotemporal encoding parameters for HEVC. Multimedia Tools and Applications, 2017, 76, 24125-24142.	3.9	4
43	Fast coding algorithm for HEVC based on video contents. IET Image Processing, 2017, 11, 343-351.	2.5	4
44	Complexity control algorithm based on adaptive mode selection for interframe coding in high efficiency video coding. Journal of Electronic Imaging, 2017, 26, 043001.	0.9	1
45	A fast coding unit division and mode selection method for HEVC intra prediction. , 2017, , .		3
46	A Novel Quality Metric Using Spatiotemporal Correlational Data of Human Eye Maneuver. , 2017, , .		3
47	Multi-class ranking based most probable prediction unit selection for HEVC encoding. , 2017, , .		1
48	Fuzzy SVM-Based Coding Unit Decision in HEVC. IEEE Transactions on Broadcasting, 2018, 64, 681-694.	3.2	43
49	Efficient CU and PU Decision Based on Motion Information for Interprediction of HEVC. IEEE Transactions on Industrial Informatics, 2018, 14, 4735-4745.	11.3	17
50	Fast Integer Motion Estimation With Bottom-Up Motion Vector Prediction for an HEVC Encoder. IEEE Transactions on Circuits and Systems for Video Technology, 2018, 28, 3398-3411.	8.3	13
51	Two-Stage Fast Inter CU Decision for HEVC Based on Bayesian Method and Conditional Random Fields. IEEE Transactions on Circuits and Systems for Video Technology, 2018, 28, 3223-3235.	8.3	16
52	Fast and effective CU size decision based on spatial and temporal homogeneity detection. Multimedia Tools and Applications, 2018, 77, 5907-5927.	3.9	13
53	Content-Adaptive Feature-Based CU Size Prediction for Fast Low-Delay Video Encoding in HEVC. IEEE Transactions on Circuits and Systems for Video Technology, 2018, 28, 693-705.	8.3	30
54	A fast inter CU decision algorithm for HEVC. Signal Processing: Image Communication, 2018, 60, 211-223.	3.2	7

#	ARTICLE	IF	CITATIONS
55	Complexity reduction in the HEVC/H265 standard based on smooth region classification. , 2018, 73, 24-39.		13
56	Fast Motion Estimation Algorithm with Efficient Memory Access for HEVC Hardware Encoders. , 2018, , .		6
57	Efficient Video Coding Using Visual Sensitive Information for HEVC Coding Standard. IEEE Access, 2018, 6, 75695-75708.	4.2	1
58	Real-time Complexity Control for High Efficiency Video Coding. , 2018, , .		3
59	Fast inter-prediction algorithm based on motion vector information for high efficiency video coding. Eurasip Journal on Image and Video Processing, 2018, 2018, .	2.6	3
60	CNN Based CU Partition Mode Decision Algorithm for HEVC Inter Coding. , 2018, , .		13
61	Low bit rate Intra prediction coding for Medical image Sequences using HEVC Standard. , 2018, , .		0
62	Large-scale video compression: recent advances and challenges. Frontiers of Computer Science, 2018, 12, 825-839.	2.4	3
63	A Motion-Based Partitioning Algorithm for HEVC Using a Pre-Analysis Stage. IEEE Transactions on Circuits and Systems for Video Technology, 2019, 29, 1448-1461.	8.3	3
64	Fast Bayesian decision based block partitioning algorithm for HEVC. Multimedia Tools and Applications, 2019, 78, 9129-9147.	3.9	3
65	Adaptive Early Termination Algorithm Using Coding Unit Depth History in HEVC. Journal of Signal Processing Systems, 2019, 91, 863-873.	2.1	9
66	Time-Constrained Video Delivery Using Adaptive Coding Parameters. IEEE Transactions on Circuits and Systems for Video Technology, 2019, 29, 2082-2095.	8.3	3
67	Hybrid Fast Motion Estimation for HEVC. , 2019, , .		0
68	Fast inter mode decision exploiting intra-block similarity in HEVC. Signal Processing: Image Communication, 2019, 78, 503-510.	3.2	4
69	An Improvised video coding algorithm for deep learning-based video transmission using HEVC. Soft Computing, 2019, 23, 8503-8514.	3.6	2
70	A Multi-Pass Coding Mode Search Framework For AV1 Encoder Optimization. , 2019, , .		5
71	Low-Complexity and Hardware-Friendly H.265/HEVC Encoder for Vehicular Ad-Hoc Networks. Sensors, 2019, 19, 1927.	3.8	18
72	Acceleration for HEVC Encoder by Bimodal Segmentation of Rate-Distortion Cost and Accurate Determination of Early Termination and Early Split. IEEE Access, 2019, 7, 45259-45273.	4.2	4

#	ARTICLE	IF	CITATIONS
73	Adaptive inter CU partitioning based on a look-ahead stage for HEVC. Signal Processing: Image Communication, 2019, 76, 97-108.	3.2	9
74	Effectiveness of crypto-transcoding for H.264/AVC and HEVC video bit-streams. Multimedia Tools and Applications, 2019, 78, 21455-21484.	3.9	7
75	Predicting split decisions of coding units in HEVC video compression using machine learning techniques. Multimedia Tools and Applications, 2019, 78, 32735-32754.	3.9	6
76	Unimodal Model-Based Inter Mode Decision for High Efficiency Video Coding. IEEE Access, 2019, 7, 27936-27947.	4.2	1
77	Exposing Video Compression History by Detecting Transcoded HEVC Videos from AVC Coding. Symmetry, 2019, 11, 67.	2.2	9
78	EMAN: The Human Visual Feature Based No-Reference Subjective Quality Metric. IEEE Access, 2019, 7, 46152-46164.	4.2	2
80	Efficient HEVC Inter Prediction using SVM. , 2019, , .		0
81	A comparative study on spiking neural network encoding schema: implemented with cloud computing. Cluster Computing, 2019, 22, 419-433.	5.0	15
82	Homogeneity-based fast CU partitioning algorithm for HEVC intra coding. Engineering Science and Technology, an International Journal, 2019, 22, 706-714.	3.2	6
83	Fast inter-frame prediction in multi-view video coding based on perceptual distortion threshold model. Signal Processing: Image Communication, 2019, 70, 199-209.	3.2	4
84	Fast mode decision and early termination based on perceptual visual quality for HEVC encoders. Journal of Real-Time Image Processing, 2019, 16, 1927-1942.	3.5	2
85	Motion and disparity vectors early determination for texture video in 3D-HEVC. Multimedia Tools and Applications, 2020, 79, 4297-4314.	3.9	25
86	HEVC optimization based on human perception for real-time environments. Multimedia Tools and Applications, 2020, 79, 16001-16033.	3.9	3
87	Fast video encoding based on random forests. Journal of Real-Time Image Processing, 2020, 17, 1029-1049.	3.5	8
88	Fast 3D-HEVC Depth Map Encoding Using Machine Learning. IEEE Transactions on Circuits and Systems for Video Technology, 2020, 30, 850-861.	8.3	31
89	Recent Advances on HEVC Inter-Frame Coding: From Optimization to Implementation and Beyond. IEEE Transactions on Circuits and Systems for Video Technology, 2020, 30, 4321-4339.	8.3	12
90	High efficiency coding for surveillance videos based on selective based fast intra coding. Multimedia Tools and Applications, 2020, 79, 14079-14101.	3.9	0
91	A Spatiotemporal Content-Based CU Size Decision Algorithm for HEVC. IEEE Transactions on Broadcasting, 2020, 66, 100-112.	3.2	16

#	ARTICLE	IF	CITATIONS
92	Tile Adaptation for Workload Balancing of 3D-HEVC Encoder in Homogeneous Multicore Systems. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 1704-1714.	5.4	1
93	Prediction mode grouping and coding bits grouping based on texture complexity for Fast HEVC intra-coding. Journal of Real-Time Image Processing, 2021, 18, 839-856.	3.5	4
94	Complexity Analysis of New Future Video Coding (FVC) Standard Technology. International Journal of Digital Multimedia Broadcasting, 2021, 2021, 1-13.	0.6	2
95	Early Intra CU Size Decision for Versatile Video Coding Based on a Tunable Decision Model. IEEE Transactions on Broadcasting, 2021, 67, 710-720.	3.2	38
96	An Effective CU Depth Decision Method for HEVC Using Machine Learning. Computer Systems Science and Engineering, 2021, 39, 275-286.	2.4	2
97	Video coding and processing: A survey. Neurocomputing, 2020, 408, 331-344.	5.9	7
98	A fast CU partitioning algorithm in HEVC inter prediction for HD/UHD video. , 2016, , .		5
99	A Fast HEVC Encoding Method Using Depth Information of Collocated CUs and RD Cost Characteristics of PU Modes. IEEE Transactions on Broadcasting, 2017, 63, 680-692.	3.2	25
100	Complexity reduction for HEVC encoder using multiplication free one-bit transformation. Journal of Electronic Imaging, 2018, 27, 1.	0.9	2
101	Fast Mode Decision in the HEVC Video Coding Standard by Exploiting Region with Dominated Motion and Saliency Features. PLoS ONE, 2016, 11, e0150673.	2.5	9
102	Inter Prediction Complexity Reduction for HEVC based on Residuals Characteristics. International Journal of Advanced Computer Science and Applications, 2016, 7, .	0.7	6
103	Accelerating HEVC Inter Prediction with Improved Merge Mode Handling. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2017, E100.A, 546-554.	0.3	2
104	High Efficiency CU Depth Prediction Algorithm for High Resolution Applications of HEVC. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2015, E98.A, 2528-2536.	0.3	2
105	Low Complexity H.265/HEVC Coding Unit Size Decision for a Videoconferencing System. Cybernetics and Information Technologies, 2015, 15, 159-167.	1.1	0
107	QMET: A new quality assessment metric for no-reference video coding by using human eye traversal. , 2016, , .		5
108	Fast Coding Unit Decision Algorithm Based on Region of Interest by Motion Vector in HEVC. Journal of the Institute of Electronics and Information Engineers, 2016, 53, 41-47.	0.0	0
109	Learning Based Fast H.264/AVC to HEVC INTRA Video Transcoding for Cloud Media Computing. Lecture Notes in Computer Science, 2017, , 385-395.	1.3	1
110	A Progressive Fast CU Split Decision Scheme for AVS3. , 2020, , .		0

#	ARTICLE	IF	CITATIONS
111	CBREN: Convolutional Neural Networks for Constant Bit Rate Video Quality Enhancement. IEEE Transactions on Circuits and Systems for Video Technology, 2022, 32, 4138-4149.	8.3	5
112	Early Termination of CU Partition Based on Boosting Neural Network for 3D-HEVC Inter-Coding. IEEE Access, 2022, 10, 13870-13883.	4.2	4
114	Progressive Point Cloud Compression with the Fusion of Symmetry Based Convolutional Neural Pyramid and Vector Quantization. , 2021, , .		1
115	A Bottom-up Fast CU Partition Scoring Mechanism for AVS3. , 2021, , .		0
116	ResNet Approach for Coding Unit Fast Splitting Decision of HEVC Intra Coding. , 2021, , .		3
117	Bagged Tree and ResNet-Based Joint End-to-End Fast CTU Partition Decision Algorithm for Video Intra Coding. Electronics (Switzerland), 2022, 11, 1264.	3.1	8
118	Improved inter-view correlations for low complexity MV-HEVC. Journal of Visual Communication and Image Representation, 2022, , 103525.	2.8	0
119	Rate-Distortion-Guided Learning Approach with Cross-Projection Information for V-PCC Fast CU Decision. , 2022, , .		8
120	Optimization of AVS3 Intra Derived-Tree Mode Algorithm Based on DCT Coefficients. Lecture Notes in Electrical Engineering, 2023, , 520-527.	0.4	0
121	Low calculation cost of HEVC coding unit size based on spatial homogeneity detection. Journal of Visual Communication and Image Representation, 2023, 93, 103819.	2.8	0
122	Fast CU size decision algorithm for VVC intra coding. Multimedia Tools and Applications, 2023, 82, 28301-28322.	3.9	3
123	A Probability-Based Zero-Block Early Termination Algorithm for QSHVC. IEEE Transactions on Broadcasting, 2023, 69, 469-481.	3.2	1
124	Low Complexity Transcoding from HEVC to VVC. , 2023, , .		1
125	Unsupervised learning-based fast CU size decision for geometry videos in V-PCC. Journal of Real-Time Image Processing, 2024, 21, .	3.5	0