

# A Fast CU Size Decision Algorithm for HEVC

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Early SKIP mode decision based on Bayesian model for HEVC. , 2015, , .		5
2	A fast Coding Tree Unit depth Prediction for HEVC. , 2015, , .		1
3	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
4	Fast HEVC Inter CU Decision Based on Latent SAD Estimation. IEEE Transactions on Multimedia, 2015, 17, 2147-2159.	7.2	72
5	A Novel Fast CU Encoding Scheme Based on Spatiotemporal Encoding Parameters for HEVC Inter Coding. IEEE Transactions on Circuits and Systems for Video Technology, 2015, 25, 422-435.	8.3	125
6	Fast Coding Unit Encoding Mechanism for Low Complexity Video Coding. PLoS ONE, 2016, 11, e0151689.	2.5	1
7	Hierarchical Complexity Control of HEVC for Live Video Encoding. IEEE Access, 2016, 4, 7014-7027.	4.2	10
8	Simultaneous encoder for high-dynamic-range and low-dynamic-range video. IEEE Transactions on Consumer Electronics, 2016, 62, 420-428.	3.6	11
9	Texture-based fast CU size decision algorithm for HEVC intra coding. , 2016, , .		7
10	SATD-based joint decision algorithm for parallelized intra prediction encoder in H.265/HEVC. , 2016, , .		1
11	Computation Reduction in Transform Unit of High Efficiency Video Coding Based on Zero-Coefficients. , 2016, , .		4
12	Quadtree Degeneration for HEVC. IEEE Transactions on Multimedia, 2016, 18, 2321-2330.	7.2	16
13	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
14	Fast algorithm for the High Efficiency Video Coding (HEVC) encoder using texture analysis. Information Sciences, 2016, 364-365, 72-90.	6.9	25
15	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
16	Efficient Bit Rate Transcoding for High Efficiency Video Coding. IEEE Transactions on Multimedia, 2016, 18, 364-378.	7.2	28
17	Neyman-Pearson-Based Early Mode Decision for HEVC Encoding. IEEE Transactions on Multimedia, 2016, 18, 379-391.	7.2	48
18	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

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19	Fast inter-prediction mode decision algorithm for HEVC. Signal, Image and Video Processing, 2017, 11, 33-40.	2.7	14
20	Fast coding unit (CU) determination algorithm for high-efficiency video coding (HEVC) in smart surveillance application. Journal of Supercomputing, 2017, 73, 1063-1084.	3.6	14
21	Unimodal Stopping Model-Based Early SKIP Mode Decision for High-Efficiency Video Coding. IEEE Transactions on Multimedia, 2017, 19, 1431-1441.	7.2	31
22	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
23	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
24	An efficient Lagrangian multiplier selection method based on temporal dependency for rate-distortion optimization in H.265/HEVC. Signal Processing: Image Communication, 2017, 57, 68-75.	3.2	10
25	uAVS2-Fast encoder for the 2nd generation IEEE 1857 video coding standard. Signal Processing: Image Communication, 2017, 53, 13-23.	3.2	1
26	Binary and Multi-Class Learning Based Low Complexity Optimization for HEVC Encoding. IEEE Transactions on Broadcasting, 2017, 63, 547-561.	3.2	70
27	Video Encoder Architecture for Low-Delay Live-Streaming Events. IEEE Transactions on Multimedia, 2017, 19, 2252-2266.	7.2	5
28	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
29	Fast coding algorithm for HEVC based on video contents. IET Image Processing, 2017, 11, 343-351.	2.5	4
30	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
31	Pixel-based fast CU depth decision algorithm with edge strength for HEVC. , 2018, , .		0
32	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
33	A fast inter CU decision algorithm for HEVC. Signal Processing: Image Communication, 2018, 60, 211-223.	3.2	7
34	Fast intra coding based on CU size decision and direction mode decision for HEVC. Multimedia Tools and Applications, 2018, 77, 14907-14929.	3.9	5
35	HEVC Implementation for IoT Applications. , 2018, , .		2
36	Adaptive Quad-tree Complexity Control for HEVC. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
37	Fast Motion Estimation Algorithm for High Efficient Video Coding. , 2018, , .		3
38	Long-term prediction for hierarchical-B-picture-based coding of video with repeated shots. <i>Frontiers of Information Technology and Electronic Engineering</i> , 2018, 19, 459-470.	2.6	4
39	An Adaptive Quad-Tree Depth Range Prediction Mechanism for HEVC. <i>IEEE Access</i> , 2018, 6, 54195-54206.	4.2	5
40	Coding unit complexity-based predictions of coding unit depth and prediction unit mode for efficient HEVC-to-SHVC transcoding with quality scalability. <i>Journal of Visual Communication and Image Representation</i> , 2018, 55, 342-351.	2.8	3
41	Adaptive Early Termination Algorithm Using Coding Unit Depth History in HEVC. <i>Journal of Signal Processing Systems</i> , 2019, 91, 863-873.	2.1	9
42	Fast inter mode decision exploiting intra-block similarity in HEVC. <i>Signal Processing: Image Communication</i> , 2019, 78, 503-510.	3.2	4
43	Multilevel ML Assistance to High Efficiency Video Coding. <i>Advances in Intelligent Systems and Computing</i> , 2019, , 313-324.	0.6	0
44	Acceleration for HEVC Encoder by Bimodal Segmentation of Rate-Distortion Cost and Accurate Determination of Early Termination and Early Split. <i>IEEE Access</i> , 2019, 7, 45259-45273.	4.2	4
45	Early CU Depth Decision and Reference Picture Selection for Low Complexity MV-HEVC. <i>Symmetry</i> , 2019, 11, 454.	2.2	13
46	Adaptive inter CU partitioning based on a look-ahead stage for HEVC. <i>Signal Processing: Image Communication</i> , 2019, 76, 97-108.	3.2	9
47	Effectiveness of crypto-transcoding for H.264/AVC and HEVC video bit-streams. <i>Multimedia Tools and Applications</i> , 2019, 78, 21455-21484.	3.9	7
48	Predicting split decisions of coding units in HEVC video compression using machine learning techniques. <i>Multimedia Tools and Applications</i> , 2019, 78, 32735-32754.	3.9	6
49	Unimodal Model-Based Inter Mode Decision for High Efficiency Video Coding. <i>IEEE Access</i> , 2019, 7, 27936-27947.	4.2	1
50	Fast CU Size Decisions for HEVC Inter-Prediction Using Support Vector Machines. , 2019, , .		4
51	An efficient coding algorithm for 360-degree video based on improved adaptive QP Compensation and early CU partition termination. <i>Multimedia Tools and Applications</i> , 2019, 78, 1081-1101.	3.9	8
52	An Adaptive CU Size Decision Algorithm for HEVC Intra Prediction Based on Complexity Classification Using Machine Learning. <i>IEEE Transactions on Circuits and Systems for Video Technology</i> , 2019, 29, 144-155.	8.3	76
53	Fast mode decision and early termination based on perceptual visual quality for HEVC encoders. <i>Journal of Real-Time Image Processing</i> , 2019, 16, 1927-1942.	3.5	2
54	Rate-Distortion-Complexity Optimized Coding Mode Decision for HEVC. <i>IEEE Transactions on Circuits and Systems for Video Technology</i> , 2020, 30, 795-809.	8.3	8

#	ARTICLE	IF	CITATIONS
55	Weighted Entropy Coding and Fractional Rateâ€“Distortion Trade-Off for HEVC Encoder with Emphasis on Global Bit Rate. <i>Wireless Personal Communications</i> , 2020, 111, 267-292.	2.7	2
56	Recent Advances on HEVC Inter-Frame Coding: From Optimization to Implementation and Beyond. <i>IEEE Transactions on Circuits and Systems for Video Technology</i> , 2020, 30, 4321-4339.	8.3	12
57	iCUS: Intelligent CU Size Selection for HEVC Inter Prediction. <i>IEEE Access</i> , 2020, 8, 141143-141158.	4.2	5
58	A Spatiotemporal Content-Based CU Size Decision Algorithm for HEVC. <i>IEEE Transactions on Broadcasting</i> , 2020, 66, 100-112.	3.2	16
59	Fast CU partition decision for H.266/VVC based on the improved DAG-SVM classifier model. <i>Multimedia Systems</i> , 2021, 27, 1-14.	4.7	26
60	Fast CU Partition Decision Based on Texture for H.266/VVC. <i>Scientific Programming</i> , 2021, 2021, 1-12.	0.7	1
61	CTU depth decision algorithms for HEVC: A survey. <i>Signal Processing: Image Communication</i> , 2021, 99, 116442.	3.2	9
62	An Effective CU Depth Decision Method for HEVC Using Machine Learning. <i>Computer Systems Science and Engineering</i> , 2021, 39, 275-286.	2.4	2
63	Video coding and processing: A survey. <i>Neurocomputing</i> , 2020, 408, 331-344.	5.9	7
64	High Efficiency CU Depth Prediction Algorithm for High Resolution Applications of HEVC. <i>IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences</i> , 2015, E98.A, 2528-2536.	0.3	2
65	Low Complexity H.265/HEVC Coding Unit Size Decision for a Videoconferencing System. <i>Cybernetics and Information Technologies</i> , 2015, 15, 159-167.	1.1	0
67	Down Sampling for Fast Rough Mode Decision for a Hardware-based HEVC Intra-frame encoder. <i>Journal of Broadcast Engineering</i> , 2016, 21, 341-348.	0.1	0
68	A Fast CU Depth Decision Algorithm Based on Moving Object Detection for High Efficiency Video Coding. , 2022, , .		1
69	A Fast CU Partition Decision Strategy for AVS3 Intra Coding. , 2022, , .		3
70	SVG-CNN: A shallow CNN based on VGGNet applied to intra prediction partition block in HEVC. <i>Multimedia Tools and Applications</i> , 0, , .	3.9	0