

Danny Z Chen

List of Publications by Year in descending order

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127
papers

2,304
citations

331259

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38
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131
all docs

131
docs citations

131
times ranked

2550
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | A Corresponding Region Fusion Framework for Multi-modal Cervical Lesion Detection. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2024, , 1-1. | 1.9 | 3 |
| 2 | Search-Free Inference Acceleration for Sparse Convolutional Neural Networks. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2022, 41, 2156-2169. | 1.9 | 2 |
| 3 | VNet: a versatile network to train real-time semantic segmentation models on a single GPU. Science China Information Sciences, 2022, 65, 1. | 2.7 | 2 |
| 4 | TGSA: protein-protein association-based twin graph neural networks for drug response prediction with similarity augmentation. Bioinformatics, 2022, 38, 461-468. | 1.8 | 16 |
| 5 | Discriminative Cervical Lesion Detection in Colposcopic Images With Global Class Activation and Local Bin Excitation. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 1411-1421. | 3.9 | 28 |
| 6 | STNet: An End-to-End Generative Framework for Synthesizing Spatiotemporal Super-Resolution Volumes. IEEE Transactions on Visualization and Computer Graphics, 2022, 28, 270-280. | 2.9 | 22 |
| 7 | IMIIN: An inter-modality information interaction network for 3D multi-modal breast tumor segmentation. Computerized Medical Imaging and Graphics, 2022, 95, 102021. | 3.5 | 14 |
| 8 | Data-Driven Deep Supervision for Medical Image Segmentation. IEEE Transactions on Medical Imaging, 2022, 41, 1560-1574. | 5.4 | 19 |
| 9 | HMKRAutoEncoder: An Interpretable Deep Learning Framework for Time Series Analysis. IEEE Transactions on Emerging Topics in Computing, 2022, 10, 99-111. | 3.2 | 3 |
| 10 | CMC-Net: 3D calf muscle compartment segmentation with sparse annotation. Medical Image Analysis, 2022, 79, 102460. | 7.0 | 3 |
| 11 | H-EMD: A Hierarchical Earth Mover's Distance Method for Instance Segmentation. IEEE Transactions on Medical Imaging, 2022, 41, 2582-2597. | 5.4 | 7 |
| 12 | A Deep Learning Approach for Detecting Colorectal Cancer via Raman Spectra. BME Frontiers, 2022, , | 2.2 | 18 |
| 13 | Scalar2Vec: Translating Scalar Fields to Vector Fields via Deep Learning. , 2022, , | | 6 |
| 14 | Towards Interpretable Arrhythmia Classification With Human-Machine Collaborative Knowledge Representation. IEEE Transactions on Biomedical Engineering, 2021, 68, 2098-2109. | 2.5 | 16 |
| 15 | A Deep Learning Approach for Colonoscopy Pathology WSI Analysis: Accurate Segmentation and Classification. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 3700-3708. | 3.9 | 64 |
| 16 | KerNet: A Novel Deep Learning Approach for Keratoconus and Sub-Clinical Keratoconus Detection Based on Raw Data of the Pentacam HR System. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 3898-3910. | 3.9 | 22 |
| 17 | Reconstructing Unsteady Flow Data From Representative Streamlines via Diffusion and Deep-Learning-Based Denoising. IEEE Computer Graphics and Applications, 2021, 41, 111-121. | 1.0 | 16 |
| 18 | Cascaded SE-ResUnet for segmentation of thoracic organs at risk. Neurocomputing, 2021, 453, 357-368. | 3.5 | 23 |

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| 19 | Interactive Few-Shot Learning: Limited Supervision, Better Medical Image Segmentation. IEEE Transactions on Medical Imaging, 2021, 40, 2575-2588. | 5.4 | 44 |
| 20 | VTG-Net: A CNN Based Vessel Topology Graph Network for Retinal Artery/Vein Classification. Frontiers in Medicine, 2021, 8, 750396. | 1.2 | 7 |
| 21 | An Annotation Sparsification Strategy for 3D Medical Image Segmentation via Representative Selection and Self-Training. Proceedings of the AAAI Conference on Artificial Intelligence, 2020, 34, 6925-6932. | 3.6 | 24 |
| 22 | A Hierarchical Graph Network for 3D Object Detection on Point Clouds. , 2020, , . | | 85 |
| 23 | SSR-VFD: Spatial Super-Resolution for Vector Field Data Analysis and Visualization. , 2020, , . | | 38 |
| 24 | Visual Relationship Detection With A Deep Convolutional Relationship Network. , 2020, , . | | 2 |
| 25 | CNS-Native Myeloid Cells Drive Immune Suppression in the Brain Metastatic Niche through Cxcl10. Cell, 2020, 183, 1234-1248.e25. | 13.5 | 79 |
| 26 | A Cross-Domain Metal Trace Restoring Network for Reducing X-Ray CT Metal Artifacts. IEEE Transactions on Medical Imaging, 2020, 39, 3831-3842. | 5.4 | 16 |
| 27 | Communication Lower Bound in Convolution Accelerators. , 2020, , . | | 21 |
| 28 | An irregular metal trace inpainting network for x-ray CT metal artifact reduction. Medical Physics, 2020, 47, 4087-4100. | 1.6 | 18 |
| 29 | SSN: A Stair-Shape Network for Real-Time Polyp Segmentation in Colonoscopy Images. , 2020, , . | | 9 |
| 30 | Long Live TIME: Improving Lifetime and Security for NVM-Based Training-in-Memory Systems. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 4707-4720. | 1.9 | 9 |
| 31 | Search-free Accelerator for Sparse Convolutional Neural Networks. , 2020, , . | | 2 |
| 32 | Swallow: A Versatile Accelerator for Sparse Neural Networks. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 4881-4893. | 1.9 | 11 |
| 33 | Cartilage Segmentation in High-Resolution 3D Micro-CT Images via Uncertainty-Guided Self-training with Very Sparse Annotation. Lecture Notes in Computer Science, 2020, 12261, 802-812. | 1.0 | 17 |
| 34 | Multi-Modal Fusion Learning For Cervical Dysplasia Diagnosis. , 2019, , . | | 14 |
| 35 | Flow Field Reduction Via Reconstructing Vector Data From 3-D Streamlines Using Deep Learning. IEEE Computer Graphics and Applications, 2019, 39, 54-67. | 1.0 | 29 |
| 36 | CC-NET: Image Complexity Guided Network Compression for Biomedical Image Segmentation. , 2019, , . | | 18 |

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| 37 | Cascade Decoder: A Universal Decoding Method For Biomedical Image Segmentation. , 2019, , . | | 7 |
| 38 | Single Cells Exhibit Differing Behavioral Phases during Early Stages of Pseudomonas aeruginosa Swarming. Journal of Bacteriology, 2019, 201, . | 1.0 | 8 |
| 39 | Automated tracking and analysis of ant trajectories shows variation in forager exploration. Scientific Reports, 2019, 9, 13246. | 1.6 | 22 |
| 40 | Accelerating DNN-based 3D point cloud processing for mobile computing. Science China Information Sciences, 2019, 62, 1. | 2.7 | 6 |
| 41 | Decoding Calcium Signaling Dynamics during Drosophila Wing Disc Development. Biophysical Journal, 2019, 116, 725-740. | 0.2 | 39 |
| 42 | Computing Shortest Paths Among Polygonal Obstacles in the Plane. Algorithmica, 2019, 81, 2430-2483. | 1.0 | 4 |
| 43 | Thread: Towards fine-grained precision reconfiguration in variable-precision neural network accelerator. IEICE Electronics Express, 2019, 16, 20190145-20190145. | 0.3 | 3 |
| 44 | FeMAT: Exploring In-Memory Processing in Multifunctional FeFET-Based Memory Array. , 2019, , . | | 18 |
| 45 | Label-free visualization and characterization of extracellular vesicles in breast cancer. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 24012-24018. | 3.3 | 58 |
| 46 | moDNN: Memory Optimal Deep Neural Network Training on Graphics Processing Units. IEEE Transactions on Parallel and Distributed Systems, 2019, 30, 646-661. | 4.0 | 7 |
| 47 | Power and Area Efficient FPGA Building Blocks Based on Ferroelectric FETs. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 1780-1793. | 3.5 | 21 |
| 48 | Multi-view Learning with Feature Level Fusion for Cervical Dysplasia Diagnosis. Lecture Notes in Computer Science, 2019, , 329-338. | 1.0 | 10 |
| 49 | Computing with ferroelectric FETs: Devices, models, systems, and applications. , 2018, , . | | 48 |
| 50 | moDNN: Memory optimal DNN training on GPUs. , 2018, , . | | 16 |
| 51 | Design and optimization of FeFET-based crossbars for binary convolution neural networks. , 2018, , . | | 39 |
| 52 | Rescuing memristor-based computing with non-linear resistance levels. , 2018, , . | | 7 |
| 53 | Online scheduling of moldable parallel tasks. Journal of Scheduling, 2018, 21, 647-654. | 1.3 | 17 |
| 54 | Hardware Trojan Detection in Third-Party Digital Intellectual Property Cores by Multilevel Feature Analysis. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2018, 37, 1370-1383. | 1.9 | 42 |

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| 55 | Predicting Local Inversions Using Rectangle Clustering and Representative Rectangle Prediction. , 2018, , . | | 3 |
| 56 | Dadu-P: A Scalable Accelerator for Robot Motion Planning in a Dynamic Environment. , 2018, , . | | 7 |
| 57 | Long Live TIME: Improving Lifetime for Training-In-Memory Engines by Structured Gradient Sparsification. , 2018, , . | | 3 |
| 58 | Biomedical Image Segmentation Using Fully Convolutional Networks on TrueNorth. , 2018, , . | | 3 |
| 59 | A new registration approach for dynamic analysis of calcium signals in organs. , 2018, 2018, 934-937. | | 4 |
| 60 | Computing the Visibility Polygon of an Island in a Polygonal Domain. Algorithmica, 2017, 77, 40-64. | 1.0 | 5 |
| 61 | A Deep Learning Approach for Blind Drift Calibration of Sensor Networks. IEEE Sensors Journal, 2017, 17, 4158-4171. | 2.4 | 59 |
| 62 | A General Framework for Hardware Trojan Detection in Digital Circuits by Statistical Learning Algorithms. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2017, 36, 1633-1646. | 1.9 | 23 |
| 63 | Suggestive Annotation: A Deep Active Learning Framework for Biomedical Image Segmentation. Lecture Notes in Computer Science, 2017, , 399-407. | 1.0 | 245 |
| 64 | Three-dimensional visualization and a deep-learning model reveal complex fungal parasite networks in behaviorally manipulated ants. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12590-12595. | 3.3 | 65 |
| 65 | Inversion detection using PacBio long reads. , 2017, , . | | 3 |
| 66 | Single molecule sequencing-guided scaffolding and correction of draft assemblies. BMC Genomics, 2017, 18, 879. | 1.2 | 6 |
| 67 | Coarse-to-Fine Stacked Fully Convolutional Nets for lymph node segmentation in ultrasound images. , 2016, , . | | 44 |
| 68 | Single molecule sequencing-guided scaffolding and correction of draft assemblies. , 2016, , . | | 0 |
| 69 | Matroid and Knapsack Center Problems. Algorithmica, 2016, 75, 27-52. | 1.0 | 23 |
| 70 | Kinetic Transition Networks for the Thomson Problem and Smale's Seventh Problem. Physical Review Letters, 2016, 117, 028301. | 2.9 | 21 |
| 71 | Segmentation and tracking of Pseudomonas aeruginosa for cell dynamics analysis in time-lapse images. , 2016, , . | | 3 |
| 72 | A seeding-searching-ensemble method for gland segmentation in H&E-stained images. BMC Medical Informatics and Decision Making, 2016, 16, 80. | 1.5 | 2 |

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| 73 | Iris recognition based on human-interpretable features. , 2015, , . | | 4 |
| 74 | Optimization approaches to volumetric modulated arc therapy planning. Medical Physics, 2015, 42, 1367-1377. | 1.6 | 56 |
| 75 | A two-layer structure prediction framework for microscopy cell detection. Computerized Medical Imaging and Graphics, 2015, 41, 29-36. | 3.5 | 1 |
| 76 | Packing cubes into a cube is NP-complete in the strong sense. Journal of Combinatorial Optimization, 2015, 29, 197-215. | 0.8 | 2 |
| 77 | Optimal Point Movement for Covering Circular Regions. Algorithmica, 2015, 72, 379-399. | 1.0 | 17 |
| 78 | Two-Point L1 Shortest Path Queries in the Plane. , 2014, , . | | 5 |
| 79 | An Automated Approach for Fibrin Network Segmentation and Structure Identification in 3D Confocal Microscopy Images. , 2014, , . | | 6 |
| 80 | 62.4L: <i>Lateâ€News Paper</i>: Light Emitting Memory: A Modular LED Panel with 10K True Color Frame Rate for 3D Display Applications. Digest of Technical Papers SID International Symposium, 2014, 45, 918-921. | 0.1 | 1 |
| 81 | New Algorithms for Facility Location Problems on the Real Line. Algorithmica, 2014, 69, 370-383. | 1.0 | 10 |
| 82 | Outlier Respecting Points Approximation. Algorithmica, 2014, 69, 410-430. | 1.0 | 0 |
| 83 | Notch-Dependent Repression of miR-155 in the Bone Marrow Niche Regulates Hematopoiesis in an NF- κ B-Dependent Manner. Cell Stem Cell, 2014, 15, 51-65. | 5.2 | 161 |
| 84 | The topology aware file distribution problem. Journal of Combinatorial Optimization, 2013, 26, 621-635. | 0.8 | 0 |
| 85 | Approximating Points by a Piecewise Linear Function. Algorithmica, 2013, 66, 682-713. | 1.0 | 10 |
| 86 | Algorithms on Minimizing the Maximum Sensor Movement for Barrier Coverage of a Linear Domain. Discrete and Computational Geometry, 2013, 50, 374-408. | 0.4 | 52 |
| 87 | GPU acceleration of Data Assembly in Finite Element Methods and its energy implications. , 2013, , . | | 5 |
| 88 | FITTING A STEP FUNCTION TO A POINT SET WITH OUTLIERS BASED ON SIMPLICIAL THICKNESS DATA STRUCTURES. International Journal of Computational Geometry and Applications, 2012, 22, 215-241. | 0.3 | 1 |
| 89 | LOCATING AN OBNOXIOUS LINE AMONG PLANAR OBJECTS. International Journal of Computational Geometry and Applications, 2012, 22, 391-405. | 0.3 | 1 |
| 90 | Flattening topologically spherical surface. Journal of Combinatorial Optimization, 2012, 23, 309-321. | 0.8 | 1 |

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| 91 | Memory-efficient volume ray tracing on GPU for radiotherapy. , 2011, , . | | 4 |
| 92 | Correlation between fibrin network structure and mechanical properties: an experimental and computational analysis. Soft Matter, 2011, 7, 4983. | 1.2 | 45 |
| 93 | New algorithms for online rectangle filling with k -lookahead. Journal of Combinatorial Optimization, 2011, 21, 67-82. | 0.8 | 3 |
| 94 | Shape Rectangularization Problems in Intensity-Modulated Radiation Therapy. Algorithmica, 2011, 60, 421-450. | 1.0 | 3 |
| 95 | Coupled Path Planning, Region Optimization, and Applications in Intensity-modulated Radiation Therapy. Algorithmica, 2011, 60, 152-174. | 1.0 | 11 |
| 96 | A New Algorithm for a Field Splitting Problem in Intensity-Modulated Radiation Therapy. Algorithmica, 2011, 61, 656-673. | 1.0 | 3 |
| 97 | Representing a Functional Curve by Curves with Fewer Peaks. Discrete and Computational Geometry, 2011, 46, 334-360. | 0.4 | 12 |
| 98 | FREE-FORM SURFACE PARTITION IN 3-D. International Journal of Computational Geometry and Applications, 2011, 21, 609-634. | 0.3 | 4 |
| 99 | PROCESSING AN OFFLINE INSERTION-QUERY SEQUENCE WITH APPLICATIONS. International Journal of Foundations of Computer Science, 2011, 22, 1439-1456. | 0.8 | 1 |
| 100 | FINDING MANY OPTIMAL PATHS WITHOUT GROWING ANY OPTIMAL PATH TREES. International Journal of Computational Geometry and Applications, 2010, 20, 449-469. | 0.3 | 2 |
| 101 | Combined experimental and simulation study of blood clot formation. , 2009, , . | | 1 |
| 102 | Guest Editors'™ Forward. Algorithmica, 2009, 53, 155-156. | 1.0 | 0 |
| 103 | Segmentation, reconstruction, and analysis of blood thrombi in 2-photon microscopy images. , 2009, , . | | 5 |
| 104 | A multi-FPGA accelerator for radiation dose calculation in cancer treatment. , 2009, , . | | 0 |
| 105 | MOUNTAIN REDUCTION, BLOCK MATCHING, AND APPLICATIONS IN INTENSITY-MODULATED RADIATION THERAPY. International Journal of Computational Geometry and Applications, 2008, 18, 63-106. | 0.3 | 2 |
| 106 | GENERALIZED GEOMETRIC APPROACHES FOR LEAF SEQUENCING PROBLEMS IN RADIATION THERAPY. International Journal of Computational Geometry and Applications, 2006, 16, 175-204. | 0.3 | 16 |
| 107 | An FPGA Solution for Radiation Dose Calculation. , 2006, , . | | 9 |
| 108 | MINIMUM AREA CONVEX PACKING OF TWO CONVEX POLYGONS. International Journal of Computational Geometry and Applications, 2006, 16, 41-74. | 0.3 | 9 |

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| 109 | Efficient Algorithms and Implementations for Optimizing the Sum of Linear Fractional Functions, with Applications. Journal of Combinatorial Optimization, 2005, 9, 69-90. | 0.8 | 19 |
| 110 | EFFICIENT APPROXIMATION ALGORITHMS FOR PAIRWISE DATA CLUSTERING AND APPLICATIONS. International Journal of Computational Geometry and Applications, 2004, 14, 85-104. | 0.3 | 4 |
| 111 | Efficient Algorithms for k-Terminal Cuts on Planar Graphs. Algorithmica, 2004, 38, 299-316. | 1.0 | 11 |
| 112 | GEOMETRIC ALGORITHMS FOR STATIC LEAF SEQUENCING PROBLEMS IN RADIATION THERAPY. International Journal of Computational Geometry and Applications, 2004, 14, 311-339. | 0.3 | 13 |
| 113 | Computing Optimal Beams in Two and Three Dimensions. Journal of Combinatorial Optimization, 2003, 7, 111-136. | 0.8 | 14 |
| 114 | SPACE-EFFICIENT ALGORITHMS FOR APPROXIMATING POLYGONAL CURVES IN TWO-DIMENSIONAL SPACE. International Journal of Computational Geometry and Applications, 2003, 13, 95-111. | 0.3 | 27 |
| 115 | TOPOLOGICAL PEELING AND APPLICATIONS. International Journal of Computational Geometry and Applications, 2003, 13, 135-172. | 0.3 | 7 |
| 116 | IMAGE SEGMENTATION WITH ASTEROIDALITY/TUBULARITY AND SMOOTHNESS CONSTRAINTS. International Journal of Computational Geometry and Applications, 2002, 12, 413-428. | 0.3 | 12 |
| 117 | OPTIMAL POLYGON COVER PROBLEMS AND APPLICATIONS. International Journal of Computational Geometry and Applications, 2002, 12, 309-338. | 0.3 | 2 |
| 118 | Determining an Optimal Penetration Among Weighted Regions in Two and Three Dimensions. Journal of Combinatorial Optimization, 2001, 5, 59-79. | 0.8 | 25 |
| 119 | ON CONNECTING RED AND BLUE RECTILINEAR POLYGONAL OBSTACLES WITH NONINTERSECTING MONOTONE RECTILINEAR PATHS. International Journal of Computational Geometry and Applications, 2001, 11, 373-400. | 0.3 | 5 |
| 120 | ON GEOMETRIC PATH QUERY PROBLEMS. International Journal of Computational Geometry and Applications, 2001, 11, 617-645. | 0.3 | 13 |
| 121 | PARALLEL ALGORITHMS FOR LONGEST INCREASING CHAINS IN THE PLANE AND RELATED PROBLEMS. Parallel Processing Letters, 1999, 09, 511-520. | 0.4 | 1 |
| 122 | Solving the all-pair shortest path query problem on interval and circular-arc graphs. Networks, 1998, 31, 249-258. | 1.6 | 31 |
| 123 | Determining Weak Visibility of a Polygon from an Edge in Parallel. International Journal of Computational Geometry and Applications, 1998, 08, 277-304. | 0.3 | 2 |
| 124 | Finding the Convex Hull of Discs in Parallel. International Journal of Computational Geometry and Applications, 1998, 08, 305-319. | 0.3 | 4 |
| 125 | Developing algorithms and software for geometric path planning problems. ACM Computing Surveys, 1996, 28, 18. | 16.1 | 23 |
| 126 | ChroNet: A multi-task learning based approach for prediction of multiple chronic diseases. Multimedia Tools and Applications, 0, , 1. | 2.6 | 3 |

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| 127 | A dysmorphic mouse model reveals developmental interactions of chondrocranium and dermatocranium. <i>ELife</i> , 0, 11, . | 2.8 | 6 |