Pablo Andrs Arbelez

List of Publications by Citations

64 papers	7,729 citations	26 h-index	70 g-index
70 ext. papers	9,673 ext. citations	4.4 avg, IF	6.37 L-index

#	Paper	IF	Citations
64	Contour detection and hierarchical image segmentation. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2011**, 33, 898-916	13.3	2840
63	Hypercolumns for object segmentation and fine-grained localization **2015**,		605
62	Semantic contours from inverse detectors **2011**,		539
61	Multiscale Combinatorial Grouping **2014**,		531
60	Learning Rich Features from RGB-D Images for Object Detection and Segmentation. *Lecture Notes in Computer Science*, **2014**, 345-360	0.9	442
59	Simultaneous Detection and Segmentation. *Lecture Notes in Computer Science*, **2014**, 297-312	0.9	306
58	Perceptual Organization and Recognition of Indoor Scenes from RGB-D Images **2013**,		289
57	Multiscale Combinatorial Grouping for Image Segmentation and Object Proposal Generation. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2017**, 39, 128-140	13.3	265
56	From contours to regions: An empirical evaluation **2009**,		232
55	**2008**,		220
54	Deep Retinal Image Understanding. *Lecture Notes in Computer Science*, **2016**, 140-148	0.9	177
53	Semantic segmentation using regions and parts **2012**,		143
52	Indoor Scene Understanding with RGB-D Images: Bottom-up Segmentation, Object Detection and Semantic Segmentation. *International Journal of Computer Vision*, **2015**, 112, 133-149	10.6	136
51	Aligning 3D models to RGB-D images of cluttered scenes **2015**,		104
50	Convolutional Oriented Boundaries: From Image Segmentation to High-Level Tasks. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2018**, 40, 819-833	13.3	96
49	**2015**,		95
48	Occlusion boundary detection and figure/ground assignment from optical flow **2011**,		88

47	Object Instance Segmentation and Fine-Grained Localization Using Hypercolumns. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2017**, 39, 627-639	13.3	50
46	Convolutional Oriented Boundaries. *Lecture Notes in Computer Science*, **2016**, 580-596	0.9	48
45	Articulated Pose Estimation Using Discriminative Armlet Classifiers **2013**,		47
44	An image J plugin for the high throughput image analysis of in vitro scratch wound healing assays. *PLoS ONE*, **2020**, 15, e0232565	3.7	39
43	Context by region ancestry **2009**,		31
42	Constrained image segmentation from hierarchical boundaries **2008**,		29
41	Electron microscopy of biotinylated protein complexes bound to streptavidin monolayer crystals. *Journal of Structural Biology*, **2012**, 180, 249-53	3.4	27
40	Dynamic Multimodal Instance Segmentation Guided by Natural Language Queries. *Lecture Notes in Computer Science*, **2018**, 656-672	0.9	27
39	Automatic seizure detection based on imaged-EEG signals through fully convolutional networks. *Scientific Reports*, **2020**, 10, 21833	4.9	26
38	A Metric Approach to Vector-Valued Image Segmentation. *International Journal of Computer Vision*, **2006**, 69, 119-126	10.6	24
37	Experimental evaluation of support vector machine-based and correlation-based approaches to automatic particle selection. *Journal of Structural Biology*, **2011**, 175, 319-28	3.4	21
36	Energy Partitions and Image Segmentation. *Journal of Mathematical Imaging and Vision*, **2004**, 20, 43-57	1.6	21
35	Comparative validation of multi-instance instrument segmentation in endoscopy: Results of the ROBUST-MIS 2019 challenge. *Medical Image Analysis*, **2021**, 70, 101920	15.4	21
34	Multi-component Models for Object Detection. *Lecture Notes in Computer Science*, **2012**, 445-458	0.9	20
33	Finding Semantic Structures in Image Hierarchies Using Laplacian Graph Energy. *Lecture Notes in Computer Science*, **2010**, 694-707	0.9	19
32	The three R's of computer vision: Recognition, reconstruction and reorganization. *Pattern Recognition Letters*, **2016**, 72, 4-14	4.7	16
31	SMIT: Stochastic Multi-Label Image-to-Image Translation **2019**,		15
30	**2009**,		14

#	Title	Impact	Citations
29	Hand Pose Estimation for Pediatric Bone Age Assessment. *Lecture Notes in Computer Science*, **2019**, 531-539	0.9	12
28	ISINet: An Instance-Based Approach for Surgical Instrument Segmentation. *Lecture Notes in Computer Science*, **2020**, 595-605	0.9	10
27	Multi-view dynamic facial action unit detection. *Image and Vision Computing*, **2018**, 103723	3.7	8
26	Automated lung cancer diagnosis using three-dimensional convolutional neural networks. *Medical and Biological Engineering and Computing*, **2020**, 58, 1803-1815	3.1	7
25	Volumetric Semantic Segmentation using Pyramid Context Features. *Proceedings of the IEEE International Conference on Computer Vision*, **2013**, 2013, 3448-3455	3.3	7
24	Automated detection of lung nodules with three-dimensional convolutional neural networks **2017**,		7
23	Active Speakers in Context **2020**,		6
22	Classifying image sequences of astronomical transients with deep neural networks. *Monthly Notices of the Royal Astronomical Society*, **2020**, 499, 3130-3138	4.3	5
21	An Uncertainty-Aware Visual System for Image Pre-Processing. *Journal of Imaging*, **2018**, 4, 109	3.1	5
20	Design, Screening, and Testing of Non-Rational Peptide Libraries with Antimicrobial Activity: In Silico and Experimental Approaches. *Antibiotics*, **2020**, 9,	4.9	4
19	Brain Tumor Segmentation and Parsing on MRIs Using Multiresolution Neural Networks. *Lecture Notes in Computer Science*, **2018**, 332-343	0.9	4
18	Automated particle correspondence and accurate tilt-axis detection in tilted-image pairs. *Journal of Structural Biology*, **2014**, 187, 66-75	3.4	4
17	MIcro-surgical anastomose workflow recognition challenge report. *Computer Methods and Programs in Biomedicine*, **2021**, 212, 106452	6.9	4
16	A discriminant multi-scale histopathology descriptor using dictionary learning **2014**,		3
15	MANTRA: A Machine-learning Reference Light-curve Data Set for Astronomical Transient Event Recognition. *Astrophysical Journal, Supplement Series*, **2020**, 250, 11	8	3
14	SIMBA: Specific Identity Markers for Bone Age Assessment. *Lecture Notes in Computer Science*, **2020**, 753-763	0.9	3
13	Gabor Layers Enhance Network Robustness. *Lecture Notes in Computer Science*, **2020**, 450-466	0.9	3
12	PharmaNet: Pharmaceutical discovery with deep recurrent neural networks. *PLoS ONE*, **2021**, 16, e0241728	3.7	3

LIST OF PUBLICATIONS

11	Light-sheet enhanced resolution of light field microscopy for rapid imaging of large volumes **2018**,		2
10	An empirical study on global bone age assessment **2020**,		2
9	LUCAS: LUng CAncer Screening with Multimodal Biomarkers. *Lecture Notes in Computer Science*, **2020**, 115-124	0.9	2
8	Smart Pooling: AI-powered COVID-19 testing		2
7	Lung Nodule Malignancy Prediction in Sequential CT Scans: Summary of ISBI 2018 Challenge. *IEEE Transactions on Medical Imaging*, **2021**, 40, 3748-3761	11.7	2
6	Optimal and fast rotational alignment of volumes with missing data in Fourier space. *Journal of Structural Biology*, **2013**, 184, 345-7	3.4	1
5	UltraGAN: Ultrasound Enhancement Through Adversarial Generation. *Lecture Notes in Computer Science*, **2020**, 120-130	0.9	1
4	PharmaNet: Pharmaceutical discovery with deep recurrent neural networks		1
3	Surgical instrument grounding for robot-assisted interventions. *Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization*,1-9	0.9	
2	SAMA: Spatially-Aware Multimodal Network with Attention For Early Lung Cancer Diagnosis. *Lecture Notes in Computer Science*, **2021**, 48-58	0.9	
1	MAIN: Multi-Attention Instance Network for video segmentation. *Computer Vision and Image Understanding*, **2021**, 210, 103240	4.3	