

# Lyndon N Smith

## List of Publications by Year in descending order

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Version: 2024-02-01

63  
papers

1,352  
citations

361045

20  
h-index

377514

34  
g-index

65  
all docs

65  
docs citations

65  
times ranked

1037  
citing authors

#	ARTICLE	IF	CITATIONS
1	Towards on-farm pig face recognition using convolutional neural networks. Computers in Industry, 2018, 98, 145-152.	5.7	203
2	The quiet revolution in machine vision - a state-of-the-art survey paper, including historical review, perspectives, and future directions. Computers in Industry, 2021, 130, 103472.	5.7	79
3	Early and non-intrusive lameness detection in dairy cows using 3-dimensional video. Biosystems Engineering, 2017, 153, 63-69.	1.9	73
4	Object surface recovery using a multi-light photometric stereo technique for non-Lambertian surfaces subject to shadows and specularities. Image and Vision Computing, 2007, 25, 1050-1057.	2.7	72
5	A photometric stereo-based 3D imaging system using computer vision and deep learning for tracking plant growth. GigaScience, 2019, 8, .	3.3	62
6	3D face reconstructions from photometric stereo using near infrared and visible light. Computer Vision and Image Understanding, 2010, 114, 942-951.	3.0	53
7	Visual features based boosted classification of weeds for real-time selective herbicide sprayer systems. Computers in Industry, 2018, 98, 23-33.	5.7	53
8	Diabetes mellitus prediction and diagnosis from a data preprocessing and machine learning perspective. Computer Methods and Programs in Biomedicine, 2022, 220, 106773.	2.6	50
9	Mathematical modelling of influence functions in computer-controlled polishing: Part I. Applied Mathematical Modelling, 2008, 32, 2888-2906.	2.2	40
10	Automatic machine vision calibration using statistical and neural network methods. Image and Vision Computing, 2005, 23, 887-899.	2.7	37
11	Face Recognition and Verification Using Photometric Stereo: The Photoface Database and a Comprehensive Evaluation. IEEE Transactions on Information Forensics and Security, 2013, 8, 121-135.	4.5	36
12	Reflectance of human skin using colour photometric stereo: with particular application to pigmented lesion analysis. Skin Research and Technology, 2008, 14, 173-179.	0.8	34
13	Utilisation of time-variant influence functions in the computer controlled polishing. Precision Engineering, 2008, 32, 47-54.	1.8	32
14	The Photoface database. , 2011, , .		29
15	Distribution quantification on dermoscopy images for computer-assisted diagnosis of cutaneous melanomas. Medical and Biological Engineering and Computing, 2012, 50, 503-513.	1.6	29
16	Eye center localization and gaze gesture recognition for human-computer interaction. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2016, 33, 314.	0.8	29
17	Innovative 3D and 2D machine vision methods for analysis of plants and crops in the field. Computers in Industry, 2018, 97, 122-131.	5.7	28
18	Dynamic photometric stereo—a new technique for moving surface analysis. Image and Vision Computing, 2005, 23, 841-852.	2.7	24

#	ARTICLE	IF	CITATIONS
19	Examining the uncertainty of the recovered surface normal in three light photometric stereo. <i>Image and Vision Computing</i> , 2007, 25, 1073-1079.	2.7	24
20	Experimental Study and Neural Network Modeling of the Stability of Powder Injection Molding Feedstocks. <i>Materials and Manufacturing Processes</i> , 2000, 15, 419-438.	2.7	23
21	Mathematical modelling of influence functions in computer-controlled polishing: Part II. <i>Applied Mathematical Modelling</i> , 2008, 32, 2907-2924.	2.2	22
22	Filter algorithm for influence functions in the computer controlled polishing of high-quality optical lenses. <i>International Journal of Machine Tools and Manufacture</i> , 2007, 47, 107-111.	6.2	21
23	A new method describing border irregularity of pigmented lesions. <i>Skin Research and Technology</i> , 2010, 16, 66-76.	0.8	20
24	An improved photometric stereo through distance estimation and light vector optimization from diffused maxima region. <i>Pattern Recognition Letters</i> , 2014, 50, 15-22.	2.6	18
25	A system for the dynamic industrial inspection of specular freeform surfaces. <i>Optics and Lasers in Engineering</i> , 2012, 50, 632-644.	2.0	15
26	Unsupervised subsegmentation for pigmented skin lesions. <i>Skin Research and Technology</i> , 2012, 18, 77-87.	0.8	14
27	In vivo measurement of skin microrelief using photometric stereo in the presence of interreflections. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2013, 30, 278.	0.8	13
28	Photometric stereo for three-dimensional leaf venation extraction. <i>Computers in Industry</i> , 2018, 98, 56-67.	5.7	13
29	Obtaining malignant melanoma indicators through statistical analysis of 3D skin surface disruptions. <i>Skin Research and Technology</i> , 2009, 15, 262-270.	0.8	12
30	<title>Overview of passive and active vision techniques for hand-held 3D data acquisition</title>. , 2003, 4877, 16.		11
31	Simulation of an optical-sensing technique for tracking surgical tools employed in computer-assisted interventions. <i>IEEE Sensors Journal</i> , 2005, 5, 1127-1131.	2.4	11
32	Forces acting between polishing tool and workpiece surface in magnetorheological finishing. <i>Proceedings of SPIE</i> , 2008, , .	0.8	11
33	Combination of 3D skin surface texture features and 2D ABCD features for improved melanoma diagnosis. <i>Medical and Biological Engineering and Computing</i> , 2015, 53, 961-974.	1.6	11
34	Weed classification in grasslands using convolutional neural networks. , 2019, , .		11
35	A computer assisted diagnosis system for malignant melanoma using 3D skin surface texture features and artificial neural network. <i>International Journal of Modelling, Identification and Control</i> , 2010, 9, 370.	0.2	10
36	Towards Facial Expression Recognition for On-Farm Welfare Assessment in Pigs. <i>Agriculture (Switzerland)</i> , 2021, 11, 847.	1.4	10

#	ARTICLE	IF	CITATIONS
37	Using 3D differential forms to characterize a pigmented lesion in vivo. <i>Skin Research and Technology</i> , 2010, 16, 77-84.	0.8	9
38	Dynamic deflectometry: A novel approach for the on-line reconstruction of specular freeform surfaces. <i>Optics and Lasers in Engineering</i> , 2012, 50, 1765-1778.	2.0	9
39	Coherences between influence function size, polishing quality, and process time in magnetorheological finishing. , 2006, , .		8
40	Gender recognition from facial images: two or three dimensions?. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2016, 33, 333.	0.8	8
41	Precision Fibre Angle Inspection for Carbon Fibre Composite Structures Using Polarisation Vision. <i>Electronics (Switzerland)</i> , 2021, 10, 2765.	1.8	8
42	Calculation of MRF influence functions. , 2007, , .		6
43	Real-time recovery of moving 3D faces for emerging applications. <i>Computers in Industry</i> , 2013, 64, 1390-1398.	5.7	6
44	A computer vision approach to improving cattle digestive health by the monitoring of faecal samples. <i>Scientific Reports</i> , 2020, 10, 17557.	1.6	6
45	Facial Reconstruction and Alignment Using Photometric Stereo and Surface Fitting. <i>Lecture Notes in Computer Science</i> , 2009, , 88-95.	1.0	6
46	Temporal stability and performance of MR polishing fluid. , 2004, , .		5
47	Advanced techniques for computer-controlled polishing. , 2008, , .		5
48	Enhanced 3D curvature pattern and melanoma diagnosis. <i>Computerized Medical Imaging and Graphics</i> , 2011, 35, 155-165.	3.5	5
49	2.5D Facial Expression Recognition using Photometric Stereo and the Area Weighted Histogram of Shape Index. , 2012, , .		5
50	3D reconstruction of concave surfaces using polarisation imaging. <i>Journal of Modern Optics</i> , 2015, 62, 927-932.	0.6	5
51	Prediction of MRF polishing by classification of the initial error with Zernike polynomials. , 2004, , .		4
52	Combinatorial photometric stereo and its application in 3D modeling of melanoma. <i>Machine Vision and Applications</i> , 2012, 23, 1029-1045.	1.7	4
53	Segmentation of clinical lesion images using normalized cut. , 2009, , .		3
54	A efficient and practical 3D face scanner using near infrared and visible photometric stereo. <i>Procedia Computer Science</i> , 2010, 2, 11-19.	1.2	3

#	ARTICLE	IF	CITATIONS
55	Facial Geometry Estimation Using Photometric Stereo and Profile Views. Lecture Notes in Computer Science, 2009, , 1-11.	1.0	2
56	Novel Photometric Stereo Based Pulmonary Function Testing. , 2012, , .		2
57	Concealed Object Perception and Recognition Using a Photometric Stereo Strategy. Lecture Notes in Computer Science, 2009, , 445-455.	1.0	2
58	Seeing is believing in the machine vision age. Metal Powder Report, 2002, 57, 20-29.	0.3	1
59	Comparison of a new contact topographical measurement system for spherical and aspherical surfaces with interferometry. , 2004, , .		1
60	Dynamic Photometric Stereo. Lecture Notes in Computer Science, 2005, , 826-833.	1.0	1
61	<title>Vision system and three-dimensional modeling techniques for quantification of the morphology of irregular particles</title>. , 2000, 4197, 146.		0
62	Lens production enhancement by adoption of artificial influence functions and a knowledge-based system in a magnetorheological finishing process. Proceedings of SPIE, 2007, , .	0.8	0
63	Computer vision applications â€“ Special issue. Image and Vision Computing, 2007, 25, 1035-1036.	2.7	0