

# Uriel Martinez-Hernandez

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7144275/publications.pdf>

Version: 2024-02-01

69  
papers

1,011  
citations

567144

15  
h-index

552653

26  
g-index

72  
all docs

72  
docs citations

72  
times ranked

936  
citing authors

#	ARTICLE	IF	CITATIONS
1	Learning architecture for the recognition of walking and prediction of gait period using wearable sensors. <i>Neurocomputing</i> , 2022, 470, 1-10.	3.5	3
2	Recognition of human activity and the state of an assembly task using vision and inertial sensor fusion methods. , 2021, , .		5
3	Editorial: ViTac: Integrating Vision and Touch for Multimodal and Cross-Modal Perception. <i>Frontiers in Robotics and AI</i> , 2021, 8, 697601.	2.0	7
4	Predicted information gain and convolutional neural network for prediction of gait periods using a wearable sensors network. , 2021, , .		0
5	A wearable elbow exoskeleton for tremor suppression equipped with rotational semi-active actuator. <i>Mechanical Systems and Signal Processing</i> , 2021, 157, 107674.	4.4	18
6	Wearable Assistive Robotics: A Perspective on Current Challenges and Future Trends. <i>Sensors</i> , 2021, 21, 6751.	2.1	15
7	Online Interval Type-2 Fuzzy Extreme Learning Machine applied to 3D path following for Remotely Operated Underwater Vehicles. <i>Applied Soft Computing Journal</i> , 2021, , 108054.	4.1	4
8	A single-chip multimodal tactile sensor for a robotic gripper. , 2021, , .		3
9	A Low-Cost Compact Soft Tactile Sensor with a Multimodal Chip. , 2021, , .		2
10	Collaborative architecture for human-robot assembly tasks using multimodal sensors. , 2021, , .		5
11	Learning from sensory predictions for autonomous and adaptive exploration of object shape with a tactile robot. <i>Neurocomputing</i> , 2020, 382, 127-139.	3.5	7
12	Evaluation of gait transitional phases using neuromechanical outputs and somatosensory inputs in an overground walk. <i>Human Movement Science</i> , 2020, 69, 102558.	0.6	7
13	A model identification approach to quantify impact of whole-body vertical vibrations on limb compliant dynamics and walking stability. <i>Medical Engineering and Physics</i> , 2020, 80, 8-17.	0.8	4
14	Towards a context-based Bayesian recognition of transitions in locomotion activities. , 2020, , .		0
15	An Evolutionary General Type-2 Fuzzy Neural Network applied to Trajectory Planning in Remotely Operated Underwater Vehicles. , 2020, , .		1
16	Multilayer Fuzzy Extreme Learning Machine Applied to Active classification and Transport of objects using an Unmanned Aerial Vehicle. , 2020, , .		1
17	A Multilayer Interval Type-2 Fuzzy Extreme Learning Machine for the recognition of walking activities and gait events using wearable sensors. <i>Neurocomputing</i> , 2020, 389, 42-55.	3.5	27
18	Assistive Gait Wearable Robotsâ€™From the Laboratory to the Real Environment. , 2020, , 75-92.		1

#	ARTICLE	IF	CITATIONS
19	Towards an intuitive human-robot interaction based on hand gesture recognition and proximity sensors. , 2020, , .		10
20	A Motion Control System to Use Robots at up to 100 Times the Earth's Gravity. Mechanisms and Machine Science, 2020, , 334-345.	0.3	0
21	Active Touch Sensing in Mammals and Robots. , 2020, , 79-109.		1
22	General Type-2 Radial Basis Function Neural Network: A Data-Driven Fuzzy Model. IEEE Transactions on Fuzzy Systems, 2019, 27, 333-347.	6.5	34
23	A Practical Gait Feedback Method Based on Wearable Inertial Sensors for a Drop Foot Assistance Device. IEEE Sensors Journal, 2019, 19, 12235-12243.	2.4	23
24	Memory and mental time travel in humans and social robots. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20180025.	1.8	24
25	Active visual object exploration and recognition with an unmanned aerial vehicle. , 2019, , .		0
26	Towards an intelligent wearable ankle robot for assistance to foot drop. , 2019, , .		8
27	Probabilistic identification of sit-to-stand and stand-to-sit with a wearable sensor. Pattern Recognition Letters, 2019, 118, 32-41.	2.6	31
28	Hierarchical Behaviour for Object Shape Recognition Using a Swarm of Robots. Lecture Notes in Computer Science, 2019, , 355-359.	1.0	0
29	Simultaneous Bayesian Recognition of Locomotion and Gait Phases With Wearable Sensors. IEEE Sensors Journal, 2018, 18, 1282-1290.	2.4	51
30	Adaptive Bayesian inference system for recognition of walking activities and prediction of gait events using wearable sensors. Neural Networks, 2018, 102, 107-119.	3.3	74
31	Feeling the Shape: Active Exploration Behaviors for Object Recognition With a Robotic Hand. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2018, 48, 2339-2348.	5.9	35
32	Evolutionary Extreme Learning Machine for the Interval Type-2 Radial Basis Function Neural Network: A Fuzzy Modelling Approach. , 2018, , .		7
33	Recognition of Walking Activity and Prediction of Gait Periods with a CNN and First-Order MC Strategy. , 2018, , .		15
34	The Assessment of Viscoelastic Models for Nonlinear Soft Materials. , 2018, , .		2
35	Multisensory Wearable Interface for Immersion and Telepresence in Robotics. IEEE Sensors Journal, 2017, 17, 2534-2541.	2.4	25
36	Two-dimensional simulation of grain structure growth within selective laser melted AA-2024. Materials and Design, 2017, 113, 369-376.	3.3	96

#	ARTICLE	IF	CITATIONS
37	Probabilistic Locomotion Mode Recognition with Wearable Sensors. Biosystems and Biorobotics, 2017, , 1037-1042.	0.2	4
38	Towards Behavioral Based Sensorimotor Controller Design for Wearable Soft Exoskeletal Applications. Biosystems and Biorobotics, 2017, , 1281-1286.	0.2	1
39	Active sensorimotor control for tactile exploration. Robotics and Autonomous Systems, 2017, 87, 15-27.	3.0	56
40	A ROS-integrated API for the KUKA LBR iiwa collaborative robot * *The authors acknowledge support from the EPSRC Centre for Innovative Manufacturing in Intelligent Automation, in undertaking this research work under grant reference number EP/I033467/1, and the University of Sheffield Impact, Innovation and Knowledge Exchange grant "Human Robot Interaction Development". Equipment has been provided under the EPSRC Great Technologies Capital Call: Robotics and Autonomous Systems.. IFAC-PapersOnLine, 2017, 50, 15859-15864.	0.5	33
41	A combined Adaptive Neuro-Fuzzy and Bayesian strategy for recognition and prediction of gait events using wearable sensors. , 2017, , .		6
42	Prediction of gait events in walking activities with a Bayesian perception system. , 2017, 2017, 13-18.		3
43	Adaptive perception: Learning from sensory predictions to extract object shape with a biomimetic fingertip. , 2017, , .		2
44	Towards a Wearable Interface for Immersive Telepresence in Robotics. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2017, , 65-73.	0.2	4
45	Characterization of Kinetic and Kinematic Parameters for Wearable Robotics. Lecture Notes in Computer Science, 2017, , 548-556.	1.0	1
46	An integrated probabilistic framework for robot perception, learning and memory. , 2016, , .		18
47	Expressive touch: Control of robot emotional expression by touch. , 2016, , .		10
48	Bayesian perception of touch for control of robot emotion. , 2016, , .		11
49	Gait dynamic stability analysis and motor control prediction for varying terrain conditions. , 2016, , .		4
50	Tactile Sensors. , 2016, , 783-796.		14
51	RATE-DEPENDENT GAIT DYNAMIC STABILITY ANALYSIS FOR MOTOR CONTROL ESTIMATION. , 2016, , 454-463.		1
52	Active haptic shape recognition by intrinsic motivation with a robot hand. , 2015, , .		10
53	Tactile Superresolution and Biomimetic Hyperacuity. IEEE Transactions on Robotics, 2015, 31, 605-618.	7.3	50
54	Floor determination in the operation of a lift by a mobile guide robot. , 2015, , .		1

#	ARTICLE	IF	CITATIONS
55	Active Control for Object Perception and Exploration with a Robotic Hand. Lecture Notes in Computer Science, 2015, , 415-428.	1.0	3
56	Extending a Hippocampal Model for Navigation Around a Maze Generated from Real-World Data. Lecture Notes in Computer Science, 2015, , 441-452.	1.0	4
57	Telepresence: Immersion with the iCub Humanoid Robot and the Oculus Rift. Lecture Notes in Computer Science, 2015, , 461-464.	1.0	7
58	Tactile Sensors. Scholarpedia Journal, 2015, 10, 32398.	0.3	4
59	Active contour following to explore object shape with robot touch. , 2013, , .		54
60	Active Bayesian perception for angle and position discrimination with a biomimetic fingertip. , 2013, , .		24
61	Active Bayesian perception and reinforcement learning. , 2013, , .		3
62	The Coordinating Role of Language in Real-Time Multimodal Learning of Cooperative Tasks. IEEE Transactions on Autonomous Mental Development, 2013, 5, 3-17.	2.3	39
63	Active touch for robust perception under position uncertainty. , 2013, , .		39
64	A SOLID Case for Active Bayesian Perception in Robot Touch. Lecture Notes in Computer Science, 2013, , 154-166.	1.0	4
65	Angle and Position Perception for Exploration with Active Touch. Lecture Notes in Computer Science, 2013, , 405-408.	1.0	2
66	Embodied hyperacuity from Bayesian perception: Shape and position discrimination with an iCub fingertip sensor. , 2012, , .		17
67	Texture Classification through Tactile Sensing. Lecture Notes in Computer Science, 2012, , 377-379.	1.0	3
68	Towards a Framework for Tactile Perception in Social Robotics. Lecture Notes in Computer Science, 2012, , 335-336.	1.0	0
69	Active Bayesian Perception for Simultaneous Object Localization and Identification. , 0, , .		24