

Carme Torras (<http://www.iri.upc.edu/people/torras>) is Research Professor at the Spanish Scientific Research Council (CSIC) since 1991.

Academic degrees. She received M.Sc. degrees in Mathematics and Computer Science from the Universitat de Barcelona and the University of Massachusetts, in 1978 and 1981, respectively, and a Ph.D. degree in Computer Science from the Universitat Politècnica de Catalunya in 1984.

Publications. Prof. Torras has co-authored 5 books, 103 journal papers, and about 185 conference papers and book chapters. She has made contributions in several areas within Robotics, Neurocomputing and Artificial Intelligence, which have appeared in prestigious journals as follows:

Robot kinematics, Motion planning and Robot vision – 9 IEEE Trans. on Robotics, 4 Robotics and Autonomous Systems, 2 Intl. Journal of Robotics Research, 2 IEEE/ASME Trans. on Mechatronics, 2 Mechanism and Machine Theory, 2 Intelligent Service Robotics, 2 Journal of Robotic Systems, 2 Robotics and Automation Letters, 2 Journal of Intelligent and Robotic Systems, IEEE Sensors, Journal of Robotics and Computer-Integrated Manufacturing, IEEE Robotics and Automation Magazine.

Neurocomputing – 4 IEEE Trans. on Neural Networks and Learning Systems, 4 IEEE Trans. on Systems, Man and Cybernetics, 2 Neural Networks, 2 Biological Cybernetics, Journal of Mathematical Biology, IEEE Trans. on Computational Biology and Bioinformatics, IEEE Trans. on Circuits and Systems, Sensors and Actuators A-Physical, Neural Computation, Natural Computing, Theoretical Computer Science, Intl. Journal of Neural Systems, Journal of Artificial Neural Networks, Neurocomputing, Journal of Parallel and Distributed Computing, Journal of Interaction Studies, Connection Science, Machine Learning.

Geometric reasoning and Computer vision – 5 Artificial Intelligence Journal, 3 Engineering Applications of AI, 2 Intl. Journal of Computer Vision, 2 Pattern Recognition, 2 Image and Vision Computing, 2 AI Communications, Journal of Artificial Intelligence Research, Intl. J. of Pattern Recognition and Artificial Intelligence, Computer-Aided Design, Computers & Graphics, Journal of Statistical Planning and Inference, Geometriae Dedicata, Digital Signal Processing, Computer Science Review, The Visual Computer, Computer Vision and Image Understanding.

Editorial work. She is currently Editor of the IEEE Transactions on Robotics, Associate Editor of other 4 journals, and serves on the Editorial Boards of 3 journals and a book series. Moreover, she was Associate Vice-President for Publications of the IEEE Robotics and Automation Society (RAS) in 2011 and 2012.

Conference organization. Prof. Torras has been Co-Chair of several international conferences, and has served in the Program Committees of the major conferences in her areas of expertise, such as ICRA, RSS, IROS, ICAR, IJCAI, AAAI, ECAI, IJCNN, ICANN, ICML, ECML, ECAL and ECCV.

Research projects. She has been local project leader of several European projects, such as “Planning Robot Motion” (PROMotion), “Robot Control based on Neural Network Systems” (CONNY), “Self-organization and Analogical Modelling using Subsymbolic Computing” (SUBSYM), “Behavioural Learning: Sensing and Acting” (B-LEARN), the 6th framework IP project “Perception, Action and COgnition through Learning of Object-Action Complexes” (PACO-PLUS), the 7th framework STREP projects “Gardening with a Cognitive System” (GARNICS) and “Intelligent observation and execution of actions and manipulations” (IntellAct), and the H2020 project “Robots understanding their actions by imagining their effects” (IMAGINE). She is the coordinator of the Chist-Era project “Assistive interactive robotic system for support in dressing” (I-DRESS).

Thesis advisor. Prof. Torras has supervised 16 PhD theses, and some of her former students have become very renowned researchers, holding academic positions such as Defitech Professor at EPFL, Research Professor at CSIC, or Master Director at Universitat Ramon Llull, as well as executive positions in leading companies like Roca.

Awards. She received the “Narcís Monturiol” Medal of the Generalitat de Catalunya for her scientific and technological accomplishments (2000), and she was nominated Fellow of the European Coordinating Committee for Artificial Intelligence (2007), Member of Academia Europaea (2010), and Member of the Royal Academy of Sciences and Arts of Barcelona (2013).