

Avital Bechar –Bio sketch 2018

Prof. Avital Bechar is a senior research scientist and the head of the department of production, growing and environmental engineering at the Institute of Agriculture Engineering (IAE), Agriculture Research Organization (ARO) and an Associate professor at Ben Gurion University, Israel. He was appointed adjunct professor at Purdue University, USA in the years 2011-2012. Prof. Bechar holds a B.Sc. degree in Aerospace Engineering and a M.Sc. in Agricultural Engineering, both from the Technion, Israel, and a Ph.D. in Industrial Engineering from Ben-Gurion University, Israel, on agricultural robotics and human–robot integrated systems. Prof. Bechar is the founder and head of the Agricultural Robotics Lab at IAE, where he is conducting fundamental and applied research in robotics for agriculture, human-robot collaborative systems, sensor technologies and developing new concepts and approaches for the operation and development of agricultural robots. He is the author of more than 100 articles in peer reviewed scientific publications. He authored several book chapters and has lead and participated in more than 40 local and international research projects. Prof. Bechar is an associate editor of the IEEE Transactions on automation, Science and Engineering journal, the former chairman of the Israeli Society of Agricultural Engineering (ISAE), a co-founder of the Israeli Robotics Association (IROB), a member of the IEEE Technical Committee on Agricultural Robotics, a member of the intelligent automation and robotics work group (AE09) of the European Society of Agricultural Engineers (EurAgEng) and a member of the CIGR Section V committee (Systems management).

Among Prof. Bechar research projects are development of an autonomous robot for disease monitoring; a spraying robot for greenhouse specialty crops; a human-robot melon collector; an advanced human-robot collaborative system for selective tree pruning; a robotic sonar for yield assessment and plant status evaluation; and, an in-row robotic weeder for melon and water melon crops.