



IROS 2020 Workshop

Application-Driven Soft Robotic Systems: Translational Challenges

Video presentation of:

Professor Bradley Nelson
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ETH – Zurich

Presentation Title
TBC

Presentation Abstract
TBC

Biography

Professor Bradley Nelson has been the Professor of Robotics and Intelligent Systems at ETH Zürich since 2002, where his research focuses on micro robotics and nanorobotics. Fundamentally, he is interested in how to make tiny intelligent machines that are millimeters to nanometers in size. He studied mechanical engineering at the University of Illinois and the University of Minnesota, worked as a computer vision researcher at Honeywell and a software engineer at Motorola, served as a United States Peace Corps Volunteer in Botswana, Africa, and then obtained a Ph.D. in Robotics from Carnegie Mellon University. He was an Assistant Professor at the University of Illinois at Chicago and an Associate Professor at the University of Minnesota before moving to ETH. Prof. Nelson has over thirty years of experience in the field of robotics and has received a number of awards for his work in robotics, nanotechnology, and biomedicine. He was named to the "Scientific American 50", Scientific American magazine's annual list recognizing fifty outstanding acts of leadership in science and technology. His lab is the undefeated international champion in Robocup's Nanogram Soccer League, and he is in the Guinness Book of World Records for the "Most Advanced Mini Robot for Medical Use." His research group has won more than a dozen best paper awards at various international conferences and in international journals. Prof. Nelson serves on the advisory boards of a number of academic departments and research institutes across North America, Europe, and Asia and is on the editorial boards of several academic journals. He has been the Department Head of Mechanical and Process Engineering at ETH, Chairman of the ETH Electron Microscopy Center, and is a member of the Research Council of the Swiss National Science Foundation. He is also a member of the board of directors of three