

Contact

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(Personal)
www.ece.ualberta.ca/~tbs (Other)
mahdi-tavakoli.github.io/ (Portfolio)

Top Skills

Robotics
Science
Matlab

Publications

Identification and Robust H_∞ Control
of the Rotational/Translational
Actuator System
Adaptive Inverse Dynamics 4-
Channel Control of Uncertain
Nonlinear Teleoperation Systems
Bilateral Control of a Nonlinear
Pneumatic Teleoperation System
with Solenoid Valves
Stability and Performance in Delayed
Bilateral Teleoperation: Theory and
Experiments
Performance Analysis of a Haptic
Telemanipulation Task under Time
Delay

Mahdi Tavakoli

Professor (Robotics), University of Alberta
Canada

Summary

Mahdi Tavakoli is a professor in the Department of Electrical and Computer Engineering at the University of Alberta, Canada. He received his BSc and MSc degrees in Electrical Engineering from Ferdowsi University and K.N. Toosi University, Iran, in 1996 and 1999, respectively. He then received his PhD degree in Electrical and Computer Engineering from the University of Western Ontario, London, ON, Canada, in 2005. In 2006, he was a post-doctoral research associate at Canadian Surgical Technologies and Advanced Robotics (CSTAR), London, ON, Canada. In 2007-2008, and prior to joining the Department of Electrical and Computer Engineering at the University of Alberta, Dr. Tavakoli was an NSERC Post-Doctoral Fellow with the BioRobotics Laboratory of the School of Engineering and Applied Sciences at Harvard University, Cambridge, MA, USA. He is a Senior Member of IEEE and an Associate Editor for IEEE/ASME Transactions on Mechatronics, Journal of Medical Robotics Research, Control Engineering Practice, and Mechatronics.

Specialties: Mahdi Tavakoli's research interests broadly involve the areas of robotics and systems control. Specifically, his research focuses on haptics and teleoperation control, medical robotics, and image-guided surgery. Dr. Tavakoli is the first author of the book "Haptics for Teleoperated Surgical Robotic Systems" (World Scientific, 2008). See his lab website for more information: <http://www.ece.ualberta.ca/~tbs>.

Experience

University of Alberta
14 years 3 months

Professor
July 2017 - Present (5 years 5 months)

Associate Professor
July 2014 - June 2017 (3 years)
Edmonton, Canada Area

Director of Electrical Engineering
July 2013 - June 2017 (4 years)
Edmonton, Canada Area

Assistant Professor
September 2008 - June 2014 (5 years 10 months)

Glenrose Rehabilitation Hospital, Edmonton
Research Affiliate
March 2010 - February 2013 (3 years)

Harvard University
NSERC Postdoctoral Fellow
January 2007 - August 2008 (1 year 8 months)

Canadian Surgical Technologies and Advanced Robotics (CSTAR)
Postdoctoral Research Associate
January 2006 - December 2006 (1 year)

Education

The University of Western Ontario
PhD, Electrical and Computer Engineering · (2001 - 2005)

K.N. Toosi University
MSc, Electrical Engineering · (1996 - 1999)

Ferdowsi University of Mashhad
BSc, Electrical Engineering · (1992 - 1996)