

Carlo Menon, Ph.D.

Assistant Professor in the School of Engineering Science

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1. Work experience

Since January, 2007 *Assistant Professor at the School of Engineering Science of Simon Fraser University, Canada*
2005-2006 *Research fellow in the Advanced Concepts Team of the European Space Agency (ESA), Noordwijk, The Netherlands*
2003-2004 *Engineer at SpaceLight Company*
2002-2003 *Engineer at AIEM Company*
2002 *Engineer at Delta-Utec Space Research & Consultancy*

2. Practical Application of Knowledge

Patents

IP1. “Mechanisme Spherique Parallele A Deux Degres De Liberte”, filed in FRA, and US, 2007.

IP2. “Variable Volume Garments”. US appl.: App.# 61/192190, 2008. PCT application in 2009.

IP3. “Randomic vibration for treatment of blood flow disorders”, filed patent in US and Canada, 2009.

IP4. “Smart Rehabilitation Device”, filed in Canada, 2009.

IP5. “Fluidic actuators”. Filed US provisional, 2009.

IP6. “Fabrication of Adhesive systems”. Filed US provisional, 2009.

Spin-Off Company. Menon was part of the core team of researchers in the space project *COLORS* which allowed the creation of the spin-off company “Spacelight s.r.l.” (www.spacelight.it).

3. Other Evidence of Impact and Contributions

Journal Referee/Editor

Editorial Board Member of the Journal of Bionic Engineering, Elsevier Publisher.

Referee for the following scientific international journals: (1) Robotica, (2) Transactions on Robotics, (3) Robotics and Autonomous Systems, (4) Transactions on Mechatronics, (5) Journal Advances in Engineering Software, (6) Intelligent Automation and Soft Computing, (7) The Open Aerospace Engineering Journal, Bentham Science Publishers, (8) Acta Astronautica, (9) Bioinspiration & Biomimetics, (10) Applied Bionics and Biomechanics, (11) Journal of Bionic Engineering, (12) Smart Materials and Structures, (13) Journal of Intelligent Material Systems and Structures, (14) Nanotechnology, (15) Journal of Biomedical Microdevices, (16) Journal of Micromechanics and Microengineering, (17) Sensors.

Chairman/Panelist/Referee at International Conferences

Referee for: (1) IEEE/RSJ Int. Conf. Intelligent Robots and Systems (IROS), 2009; (2) IEEE/ASME Int. Conf. Advanced Intelligent Mechatronics (AIM), 2009; (3) Int. Conf. Informatics in Control, Automation and Robotics (ICINCO), 2009; (4) IEEE Int. Conf. Robotics and Automation (ICRA), 2009;

(5) Canadian Conference on Electrical and Computer Engineering 2008; (6) IEEE/RSJ Int. Conf. Intelligent Robots and Systems (IROS), 2008; (7) IEEE Int. Conf. on Robotics and Biomimetics (ROBIO), 2008; (8) IEEE/RAS/EMBS Int. Conf. Biomedical Robotics and Biomechanics (BIOROB), 2008; (9) IEEE/RSJ Int. Conf. Intelligent Robots and Systems (IROS), 2007.

Panelist and/or Chairman for: (1) Int. Symposium on Biomimetic functional surfaces with fluids interactions (FSFI'09), 2009, (2) Int. Conf. on Informatics in Control, Automation and Robotics (ICINCO), 2009; (3) ASME/IFTToMM Int. Conf. on Reconfigurable Mechanisms and Robots (ReMAR), 2009; (4) IEEE/RAS/EMBS Int. Conf. on Biomedical Robotics and Biomechanics (BIOROB), 2008; (5) Int. Conf. on Nanotechnology and Applications (NANA), 2008; (6) Int. Conf. on Bionic Engineering (ICBE), 2008; (7) CANEUS Int. Conf., 2006.

Invited Talks at Conferences

(1) Int. Conf. of Bionic Engineering (ICBE), Changchun, China, October 2008; (2) BIONIS/Swedish Biomimetics 3000® Conference, Bath Royal Literary and Sci Inst, Sept 2007; (3) Workshop on Biomimetic Robotics at 2007 IEEE Intl Conf on Robotics & Automation (ICRA); (4) Int. Conf. CANEUS, MNT for Aerospace Applications, Toulouse, France, 2006.

ESA Technical Officer

Technical Officer, viz. responsible, of 9 ESA contracts awarded to European companies/universities.

Memberships

- Technical Evaluation Board (TEB) for different ESA contracts.
- Technical Advisory Committee of the project “eCUBES” funded by the EU (12M€).

Professional Affiliations

Amer. Soc. of Mech. Eng. (ASME); Inst. of Elec. and Elec. Eng. (IEEE); Amer. Inst. of Aeronautics and Astronautics (AIAA); Italian Association of Professional Engineers - Province of Rovigo.

Awards: (1) BIONIS Biomimetics Award, Bath, UK, 2007; (2) Luigi G. Napolitano Award for the Advancement of the Aerospace Sciences, International Astronautical Federation, Valencia, ESP, 2006; (3) Invited Speaker Award, Intl Conf CANEUS, MNT for Aerospace Applic., Toulouse, FRA, 2006; (4) ESA/PAT/527 Award for patent, Noordwijk, NL, 2006; (5) Best Paper Award in Biomimetics at ROBIO Conference, Shenyang, CHN, 2004; (6) ESA Student Award for “IAF Congress in Vancouver” participation contest, Vancouver, CAN, 2004; (7) ESA Student Award for “IAF Congress in Bremen” participation contest, Bremen, DEU, 2003; (8) ESA Student Award for “Parabolic Flight Campaign” participation contest, Bordeaux, FRA, 2003.

Other Recognitions

(1) Certificate of “Outstanding contribution” to the Rosetta Space Mission, France, 2004; (2) Certificate of “Excellence Performance” for the development of the barberpole for YES2 Space Mission, NL, 2002.

4. Contributions to the Training of Highly Qualified Personnel (HQP)

Dr. Menon is currently supervising 3 Post-doctorates, 2 PhD, 12 MASc, 2 MEng, 2 undergraduate student, and 3 graduate researcher associates.

5. Scientific publications

See following website: <http://menrva.ensc.sfu.ca/node/5>