

EDUCATION

Sept 1998 - August 2001 **PhD in Systems Control and Robotics**, *Department of Mechanical Engineering*, Saga University, Saga, Japan.

Sept 1996 - August 1998 **MSc in Electrical Engineering**, *Department of Electrical Engineering*, Saga University, Saga, Japan.

April 1992 - August 1996 **BSc in Electrical Engineering, 1st class honors**, *Department of Electrical Engineering*, University of Moratuwa, Moratuwa, Sri Lanka.

WORK EXPERIENCE

From January 2017 **Reader**, *Dyson School of Design Engineering*, Imperial College, London, United Kingdom.

September 2009 - December 2016 **Senior Lecturer**, *Department of Informatics*, King's College London, London, United Kingdom.

July 2007 - January 2008 **Postdoctoral research fellow**, *School of Engineering and Applied Sciences*, Harvard University, Cambridge, MA, United States.

February 2008 - June 2009 **Research Affiliate**, *Computer Science and Artificial Intelligence Lab*, MIT, Cambridge, MA, United States.

September 2008 - June 2009 **Radcliffe Fellow**, *Radcliffe Institute for Advanced Studies*, Harvard University, Cambridge, MA, United States.

August 2003 - June 2008 **Senior lecturer**, *Department of Mechanical Engineering*, University of Moratuwa, Moratuwa, Sri Lanka.

November 2001 - July 2003 **Postdoctoral Fellow**, *Department of Biomedical Engineering, School of Medicine*, Johns Hopkins University, Baltimore, MD, United States.

AWARDS AND HONORS

2016 **IEEE senior member**, IEEE. USA

2016 **Finalist for the most innovative teacher award**, King's College London. UK

2015 **Ingenious award**, *Royal Academy of Engineers*. UK

2015 **Radcliffe Exploratory Seimannr leader**, *Radcliffe Institute*, Harvard University. USA

2012 **Best paper award**, *co-author of the paper titled "Passive Dynamics of High Frequency Bat Wing Flapping with an Anisotropic Membrane"*, *IEEE International Conference on Information and Automation for Sustainability*, ICIAfS - 2014, September 16-19, Colombo. Sri Lanka

2013 **Finalist, IEEE Franklin Taylor Best Paper award**, *co-author of the paper titled "An Optimal State Dependent Haptic Guidance Controller Via a Hard Rein"*, *IEEE International Conference on Systems man and cybernetics*, SMC-2013, October, Manchester. UK

- 2012 **Best paper award**, co-author of the paper titled "A Computationally Efficient Framework for Stochastic Prediction of Flood Propagation", *IEEE International Conference on Information and Automation for Sustainability*, ICIAfS - 2012, September 27-29, Beijing, China
- 2012 **Finalist, 2012 Royal Academy of Engineering ERA Foundation Entrepreneurs Award**, Royal Academy of Engineering, London, UK
- 2008 **Radcliffe Fellowship**, Harvard University, Cambridge, MA, United States
- description This fellowship was awarded by nomination by faculty members of the Harvard University based on the individual's academic merit and potential to serve pressing needs of the society

RESEARCH GRANTS

- Title MOTION - Morphological Computation of Perception and Action
- July, 2016- June, 2019 **EPSRC standard grant**, EP/N03211X/1, PI and coordinator of the consortium consisting of Cambridge University, Imperial College London, and University of Surrey, (Total: £1.2 million, KCL amount: £400k), UK.
- Title Four by Three
- December, 2014- November, 2017 **European Union H2020 grant**, 637095, Co-Investigator, (KCL amount: £500k), UK.
- January, 2012-Dec, 2015 **European Union FP7 Call-7 grant**, Award ref: 287728, Co-Investigator, technical manager of the consortium, (KCL amount (coordinator): €1.3m, total consortium grant: €7.38m), UK.
- Title STIFF-FLOP - STIFFness controllable Flexible and Learn-able Manipulator for surgical Operations
- March, 2011-Sept, 2012 **EPSRC first grant**, EP/I028773/1, Principal Investigator, (amount: £97k), UK.
- Title Impedance control on uncertain objects
- April, 2011-Sept, 2014 **EPSRC standard grant**, EP/I028765/1, Co-Investigator in collaboration with Sheffield Hallam University, (amount: £200k), UK.
- Title REINS: Human robot interaction through reins
- March, 2011-Dec, 2014 **European Union FP7 Call-6 grant**, 270436, Co-Investigator, (amount: £535k), UK.
- Title TOMSY-Topological Motion Synthesis for Dexterous Manipulation
- March, 2011-Dec, 2014 **European Union FP7 Call-6 grant**, 270138, Principal Investigator, (amount: €480k), UK.
- Title DARWIN-Dextrous Assembler Robot Working with embodied INtelligence

INVITED PROFESSIONAL APPOINTMENTS

- 2016-now **Associate editor**, *International Conference on Robotics and Automation*, 2016, IEEE, USA
- 2015-now **Associate editor**, *Frontiers Soft Robotics Specialty*, editor in chief: Prof. Cecilia Laschi, Frontiers, USA
- 2012 **EPSRC college of peer reviewers**, From Sept. 2012, UK.
- 2012 **Program committee**, *2012 IEEE/SICE International Conference on System Integration (SII2012)*, December 16-18, 2012, Fukuoka, Japan.

- 2014-now **Associate editor**, *Journal of Robotics and Mechatronics*, editor in chief: Prof. Takita Yoshihiro, FIJI Press.
Japan
- 2005-now **Associate editor**, *Journal of Control and Intelligent Systems*, editor in chief: Prof. Clarence de Silva, ACTA Press.
Canada
- 2005 **Founding General Chair**, *International Conference on Information and Automation for Sustainability*, with IEEE technical co-sponsorship, www.iciafs.org.
Sri Lanka, Australia, China

INTERNATIONAL NEWS AND FEATURE ARTICLES

- October issue, 2012 **IEEE Spectrum magazine**, *Robotics news on Inflatable Limb Robot Runs Around on Wiggly Legs, USA*.
- September issue, 2008 **Harvard Magazine**, *On animal-robot interaction studies, USA*.
- Issue 2653, 26th April 2008 **New Scientist Magazine**, *On legged robots and animal odor localization, UK*.

Publications

- [1] Jelizaveta Konstantinova, Giuseppe Cotugno, Prokar Dasgupta, Kaspar Althoefer, Thrishantha Nanayakkara, "Palpation Force Modulation Strategies to Identify Hard Regions in Soft Tissue Organs", in press, PLoS ONE, PONE-D-16-31711R2
- [2] Nantachai Sornkarn and Thrishantha Nanayakkara, "Can a soft robotic probe use stiffness control like a human finger to improve efficacy of haptic perception?", in press, IEEE Transactions on Haptics, 2016.
- [3] Thrishantha Nanayakkara, Allen Jiang, Maria. R. Armas Fernandez, Hongbin Liu, Kaspar Althoefer, Joao Bimbo, "Stable Grip Control on Soft Objects With Time Varying Stiffness", IEEE Transactions on Robotics, vol. 32, no. 3, pp. 626-637, 2016.
- [4] Damith Suresh Chathuranga, Wang, Zhongkui; Noh, Yohan; Thrishantha Nanayakkara; Shinichi Hirai, "Magnetic Field Modelling of a Soft Three-Axis Force Sensor", in press, IEEE Sensors, 2016.
- [5] Nantachai Sornkarn, Prokar Dasgupta, Thrishantha Nanayakkara, "Morphological Computation of Haptic Perception of a Controllable Stiffness Probe", PLOS ONE, vol. 11, no. 6, pages e0156982, 2016.
- [6] Giuseppe Cotugno, Kaspar Althoefer, Thrishantha Nanayakkara, "The Role of the Thumb: Study of Finger Motion in Grasping and Reachability Space in Human and Robotic Hands", in press, IEEE Transactions on SMC - Systems, 2016.
- [7] Isuri Wijesundera, Malka Halgamuge, Ampalavanapillai Nirmalathas, Thrishantha Nanayakkara, "MFPT Calculation for Random Walks in Inhomogeneous Networks", Physica A, 462, pp.986 - 1002, 2016.
- [8] Ranasinghe, Anuradha, Prokar Dasgupta, Kaspar Althoefer, and Thrishantha Nanayakkara, "Identification of Haptic Based Guiding Using Hard Reins", PloS one 10, no. 7, pp. 1 - 22, 2015 (DOI:10.1371/journal.pone.0132020).
- [9] Anuradha Ranasinghe, Jacques Pendaris, Prokar Dasgupta, Kaspar Althoefer, Thrishantha Nanayakkara, "Salient Features of Haptic Based Guidance of People with Limited Vision Using Hard Reins", IEEE Transactions on SMC - Cybernetics, pp. 568 - 579, 2015.
- [10] González-Fierro, Miguel, Daniel Hernandez-Garcia, Thrishantha Nanayakkara, and Carlos Balaguer. "Behavior sequencing based on demonstrations: a case of a humanoid opening a door while walking." *Advanced Robotics* vol. 29, no. 5, pp. 315-329, 2015 (DOI: 10.1080/01691864.2014.992955)
- [11] Li, Min, Jelizaveta Konstantinova, Emanuele L. Secco, Allen Jiang, Hongbin Liu, Thrishantha Nanayakkara, Lakmal D. Seneviratne, Prokar Dasgupta, Kaspar Althoefer, and Helge A. Wurdemann. "Using visual cues to enhance haptic feedback for palpation on virtual model of soft

- tissue." *Medical & Biological Engineering & Computing* pp. 1-10, 2015 (DOI: 10.1007/s11517-015-1309-4).
- [12] Miguel Gonzalez-Fierro, Daniel Hernandez Garcia, Thrishantha Nanayakkara, Carlos Balaguer, "Behavior Sequencing Based on Demonstrations - a Case of a Humanoid Opening a Door While Walking", in press, *Journal of Advanced Robotics*, pp. 315-329, 2015.
- [13] Li, Min, Shan Luo, Thrishantha Nanayakkara, Lakmal D. Seneviratne, Prokar Dasgupta, and Kaspar Althoefer. "Multi-fingered haptic palpation using pneumatic feedback actuators", *Sensors and Actuators A: Physical*, no. 218, pp. 132-141, 2014 (DOI:10.1016/j.sna.2014.08.003).
- [14] J. Konstantinova, M. Li, M. Gautam, P. Dasgupta, K. Althoefer and T. Nanayakkara. "Behavioral Characteristics of Manual Palpation to Localize Hard Nodules in Soft Tissues", *IEEE Transactions on Biomedical Engineering*, vol. 61, no. 6, pp. 1651-1659, 2014 (DOI: 10.1109/TBME.2013.2296877).
- [15] J. Konstantinova, A. Jiang, P. Dasgupta, K. Althoefer and T. Nanayakkara. "Implementation of Tactile Sensing for Robot-Assisted Minimally Invasive Surgery", *IEEE Sensors*, vol. 14, no. 8, pp. 2490 - 2501, 2014 (DOI: 10.1109/JSEN.2014.2325794).
- [16] Song, Xiaojing, Hongbin Liu, Kaspar Althoefer, Thrishantha Nanayakkara, and Lakmal D. Seneviratne. "Efficient Break-Away Friction Ratio and Slip Prediction Based on Haptic Surface Exploration", *IEEE Transactions on Robotics*, vol. 30, no. 1, pp. 203 - 219, 2014 (DOI: 10.1109/TRO.2013.2279630).
- [17] Jiang, Allen, Tommaso Ranzani, Giada Gerboni, Laura Lekstute, Kaspar Althoefer, Prokar Dasgupta, and Thrishantha Nanayakkara. "Robotic Granular Jamming: Does the Membrane Matter?", *Soft Robotics*, vol.1, no.3, pp. 192 - 201, 2014 (doi:10.1089/soro.2014.0002).
- [18] Li, Min, Shan Luo, Thrishantha Nanayakkara, Lakmal D. Seneviratne, Prokar Dasgupta, and Kaspar Althoefer. "Multi-Fingered Haptic Palpation using Pneumatic Feedback Actuators", *Sensors and Actuators A: Physical*, vol. 218, no. 1, pp. 132 - 141, 2014 (DOI:10.1016/j.sna.2014.08.003).
- [19] Gonzalez-Fierro, Miguel, Carlos Balaguer, Nicola Swann, and Thrishantha Nanayakkara. "Full-Body Postural Control of a Humanoid Robot with Both Imitation Learning and Skill Innovation", *International Journal of Humanoid Robotics*, vol. 11, no. 2, (34 pages) 2014 (DOI: 10.1142/S0219843614500121).
- [20] Cianchetti, Matteo, Tommaso Ranzani, Giada Gerboni, Thrishantha Nanayakkara, Kaspar Althoefer, Prokar Dasgupta, and Arianna Menciassi. "Soft robotics technologies to address shortcomings in today's minimally invasive surgery: the stiff-flop approach", *Soft Robotics*, vol 1, no. 2, pp. 122-131, 2014 (DOI: 10.1089/soro.2014.0001).
- [21] Calinon, Sylvain, Danilo Bruno, Milad S. Malekzadeh, Thrishantha Nanayakkara, and Darwin G. Caldwell. "Human - robot skills transfer interfaces for a flexible surgical robot", *Computer methods and programs in biomedicine*, vol. 116, no. 2, pp. 81 - 96, 2014 (DOI: 10.1016/j.cmpb.2013.12.015).
- [22] Lalitharatne, Thilina Dulantha, Kenbu Teramoto, Yoshiaki Hayashi, Thrishantha Nanayakkara, and Kazuo Kiguchi. "Evaluation of Fuzzy-Neuro Modifiers for Compensation of the Effects of Muscle Fatigue on EMG-Based Control to be Used in Upper-Limb Power-Assist Exoskeletons", *Journal of Advanced Mechanical Design, Systems, and Manufacturing*, vol. 7, no. 4, pp. 736 - 751, 2013 (DOI: 10.1299/jamdsm.7.736).
- [23] A. Jiang, P. Dasgupta, K. Althoefer, and T. Nanayakkara, "Robotic Granular Jamming: A New Variable Stiffness Mechanism", *Journal of Robotics Society of Japan*, Vol. 32 No. 4, pp.333 - 338, 2014.
- [24] Thrishantha Nanayakkara, Malka N. Halgamuge, Prasanna Sridhar, and Asad M. Madni, "Intelligent Sensing in Dynamic Environments Using Markov Decision Process", *Sensors* vol. 11, no. 1, pp. 1229-1242, 2011.
- [25] Gary Chin-Wei Sing, Wilsan M Joiner, Thrishantha Nanayakkara, Jordan B Brayanov, and Maurice Smith, "Primitives for Motor Adaptation reflect Correlated neural Turning to Position and velocity", in press, *Neuron*, 2009.

- [26] K.A.P. Siriwardena, L.C.P. Fernando, N. Nanayakkara, K. F. G. Perera, A.D.N.T. Kumara and T. Nanayakkara, "Portable Acoustic Device for Detection of Coconut Palms infested by *Rynchophorus ferrugineus* (Coleoptera: Curculionidae)", in press, Journal of Crop Protection, 2009.
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- [28] Thrishantha Nanayakkara and Reza Shadmehr, "Saccade Adaptation in Response to Altered Arm Dynamics", *Journal of Neurophysiology*, 2003, 90:4016-4021.
- [29] Thrishantha Nanayakkara, Keigo Watanabe, Kazuo Kiguchi and Kiyotaka Izumi, "Evolving a multiobjective obstacle avoidance skill of a seven-link manipulator subject to constraints," *International Journal of Systems Science*, vol. 35, no. 3, pp. 167 - 177, March 2004.
- [30] Thrishantha Nanayakkara, Kazuo Kiguchi, Tsukasa Murakami, Keigo Watanabe, Kiyotaka Izumi, "Enhancing the Autonomy of Teleoperated Redundant Manipulators Through Fusion of Intelligent Control Modules," *International Journal of Robotics and Mechatronics*, vol.14, no.3, pp.534-545, June, 2002.
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- [32] Thrishantha Nanayakkara, Keigo Watanabe, Kazuo Kiguchi and Kiyotaka Izumi, "Evolutionary Learning of a Fuzzy behavior Based Controller for a Non-Holonomic Mobile Robot in a Class of Dynamic Environments," *International Journal of Intelligent and Robotic Systems*, vol.32, no.3, pp.255-277, November, 2001.
- [33] Thrishantha Nanayakkara, Keigo Watanabe, Kazuo Kiguchi and Kiyotaka Izumi, "Fuzzy Self-Adaptive RBF Neural Network Based Control of a Seven-Link Industrial Robot Manipulator," in *Journal of Advanced Robotics*, vol. 15, no. 1, pp. 17-43, 2001.
- [34] Damith Suresh Chathuranga, Zhongkui Wang, Yohan Noh, Thrishantha Nanayakkara, Shinichi Hirai, "A Soft Three Axis Force Sensors that is Useful for Robot Grippers", 2016 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), pp. 5556 - 5563, 2016.
- [35] Sara Adela Abad Guaman, Nantachai Sornkarn, Thrishantha Nanayakkara, "The role of morphological computation of the goat hoof in slip reduction", 2016 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), pp. 5599 - 5605, 2016.
- [36] Nantachai Sornkarn and Thrishantha Nanayakkara "The Efficacy of Interaction Behavior and Internal Stiffness Control for Embodied Information Gain in Haptic Perception", accepted in IEEE International Conference on Robotics and Automation (ICRA), 2016.
- [37] Seyedmohammadhadi Sadati, Ali Shiva, Ahmad Ataka, Seyedeh Elnaz Naghibi, Ian Walker, Kaspar Althoefer, and Thrishantha Nanayakkara, "A Geometry Deformation Model for Compound Continuum Manipulators with External Loading", accepted in IEEE International Conference on Robotics and Automation (ICRA), 2016.
- [38] Jelizaveta Konstantinova, Giuseppe Cotugno, Prokar Dasgupta, Kaspar Althoefer, Thrishantha Nanayakkara, "Autonomous Robotic Palpation of Soft Tissue using the Modulation of Applied Force", 6th IEEE RAS/EMBS International Conference on Biomedical Robotics and Biomechatronics (BioRob2016), June 26-29, 2016, Singapore.
- [39] Hasitha Wegiriya, Nantachai Sornkarn, Harry Bedford and Thrishantha Nanayakkara, "Biologically Inspired Multimodal Whisker Follicle", 2016 IEEE International Conference on Systems, Man, and Cybernetics (SMC2016), 2016.
- [40] Sadati, SM Hadi, Yohan Noh, S. Elnaz Naghibi, Althoefer Kaspar, and Thrishantha Nanayakkara. "Stiffness Control of Soft Robotic Manipulator for Minimally Invasive Surgery (MIS) Using Scale Jamming." In *Intelligent Robotics and Applications*, Volume 9246 of the series Lecture Notes in Computer Science, pp 141-151, Springer International Publishing, 2015.

- [41] Thrishantha Nanayakkara, D. T. Amal Dissanayake, M. M. P. Pradeep Mahipala, and K. A. Gayan Sanjaya , "A Human-Animal-Robot Cooperative System for Anti-Personal Mine Detection", Humanitarian Demining: Innovative Solutions and the Challenges of Technology, ARS publishers, <http://www.ars-journal.com/hd.htm> , 2008.
- [42] Thrishantha Nanayakkara, Lasitha Piyathilaka, and Akila Subasingha "Mechatronics in Landmine Detection and Removal", MECHATRONIC SYSTEMS Devices, Design, Control, Operation, and Monitoring, Edited by Clarence De Silva, CRC Press, Taylor & Francis, Boca Raton, FL Chapter 28, 2007.
- [43] K. Watanabe, Thrishantha Nanayakkara, Kazuo Kiguchi, and Kiyotaka Izumi "Achieving synergy through acquisition of human skill," A New Life-Style in 21 Century Living with Cognitive and Behavioral Intelligent Artificial Liferobot, Edited by Masanori Sugisaka, Springer-Tokyo, Chapter 40, 2005.
- [44] Thrishantha Nanayakkara, Keigo Watanabe, Kazuo Kiguchi, and Kiyotaka Izumi, "Evolutionary Dynamics Identification of Multi-Link Manipulators Using Runge–Kutta–Gill RBF Networks," Soft Computing in Measurement and Information Acquisition, Edited by L. Reznik and V. Kreinovich, Physica-Verlag, pp.208–222, 2003.
- [45] Maximiliano Francisco Escudero Morland, Kaspar Althoefer, and Thrishantha Nanayakkara, "Novel Method to Form Adaptive Internal Impedance Profiles in Walkers", 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC-2015), pp. 7764-7767, 2015.
- [46] Chathuranga, Damith Suresh, Zhongkui Wang, Yohan Noh, Thrishantha Nanayakkara, and Shinichi Hirai. "Disposable Soft 3 Axis Force Sensor for Biomedical Applications." In The 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC-2015), pp. 5521-5524, 2015.
- [47] Damith Suresh Chaturanga, Zhongkui Wang, Yohan Noh, Thrishantha Nanayakkara, and Shinichi Hirai, "Robust real Time Material Classification Algorithm using Soft Three Axis Tactile Sensor: Evaluation of the Algorithm", pp. 2093 - 2098, IROS 2015.
- [48] Giuseppe Cotugno, Vishawanathan Mohan, Kaspar Althoefer, Thrishantha Nanayakkara, "Simplifying Grasping Complexity through Generalization of Kinaesthetically Learned Synergies", Proceedings of 2014 IEEE International Conference on Robotics and Automation (ICRA), pp. 5345 - 5351, 2014 (DOI: 10.1109/ICRA.2014.6907645).
- [49] Nantachai Sornkarn, Matthew Howard, Thrishantha Nanayakkara, "Internal Impedance Control helps Information Gain in Embodied Perception", Proceedings of 2014 IEEE International Conference on Robotics and Automation (ICRA), pp. 6685 - 6690, 2014 (DOI: 10.1109/ICRA.2014.6907846).
- [50] S Sareh, A Jiang, A Faragasso, Y Noh, T Nanayakkara, P Dasgupta, L D Seneviratne, H A Wurdemann, K Althoefer, "Bio-Inspired Tactile Sensor Sleeve for Surgical Soft Manipulators" Proceedings of 2014 IEEE International Conference on Robotics and Automation (ICRA), pp. 1454 – 1459, 2014 (DOI: 10.1109/ICRA.2014.6907043).
- [51] A Faragasso, J Bimbo, Y Noh, A Jiang, S Sareh, H Liu, T Nanayakkara, H A Wurdemann, K Althoefer, "Novel Uniaxial Force Sensor based on Visual Information for Minimally Invasive Surgery", Proceedings of 2014 IEEE International Conference on Robotics and Automation (ICRA), pp. 1405 – 1410, 2014 (DOI: 10.1109/ICRA.2014.6907036).
- [52] Angela Faragasso, Agostino Stilli, Joao Bimbo, Yohan Noh, Hongbin Liu, Thrishantha Nanayakkara, Prokar Dasgupta, Helge Arne Wurdemann, Kaspar Althoefer, "Endoscopic Add-On Stiffness Probe for Real-Time Soft Surface Characterisation in MIS", 36th Annual International IEEE EMBS Conference, pp. 6517 - 6520, 2014 (DOI: 10.1109/EMBC.2014.6945121).
- [53] G. Cotugno, J. Konstantinova, K. Althoefer, T. Nanayakkara, "On the Dexterity of Robotic Manipulation: Are Robotic Hands III Designed?", Proceedings of the Sixth International Conference on Cognitive Science 2014.
- [54] G.Cotugno, A. Ibrahim, K. Althoefer, T. Nanayakkara, "Human Affordances of Stacking: Best Placement or Best Outlook?", Proceedings of the Sixth International Conference on Cognitive Science 2014.

- [55] A. Jiang, S. Adejokun, A. Faragasso, K. Althoefer, P. Dasgupta, T. Nanayakkara, "The granular jamming integrated actuator", International Conference on Advanced Robotics and Intelligent Systems (ARIS 2014), Taipei, Taiwan, pp. 12 - 17, 2014 (DOI: 10.1109/ARIS.2014.6871512).
- [56] J. Konstantinova, M. Li, P. Dasgupta, K. Althoefer and T. Nanayakkara. "Palpation Strategies for Artificial Soft Tissue Examination" in 3rd Joint Workshop on New Technologies for Computer/Robot Assisted Surgery, Verona, 2013.
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- [58] Anuradha Ranasinghe, Prokar Dasgupta, Jaques Penders, Kaspar Althoefer, Thrishantha Nanayakkara, "A Two Party Haptic Guidance Controller Via a Hard Rein", in IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) 2013, Tokyo, Japan, pp.116 - 122, 2013 (DOI: 10.1109/IROS.2013.6696341).
- [59] Valerio Pereno, Kya Shoar, Giulia Bartoli, Fabio Bianchi, Thrishantha Nanayakkara, "Stable Walking on Variable Visco-Elastic Terrains using Meta-parameters for Passive State Migration", in IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), pp. 3126 - 3131, 2013 (DOI: 10.1109/IROS.2013.6696800).
- [60] J. Konstantinova, M. Li, V. Aminzadeh, P. Dasgupta, K. Althoefer, and T. Nanayakkara, "Force-Velocity Modulation Strategies for Soft Tissue Examination", in 2013 IEEE International conference on intelligent Robots and systems (IROS), pp. 1998 - 2003, 2013 (DOI: 10.1109/IROS.2013.6696622).
- [61] Miguel González-Fierro, Carlos Balaguer, Nicola Swann, Thrishantha Nanayakkara, "A Humanoid Robot Standing Up Through Learning from Demonstration Using a Multimodal Reward Function", IEEE-RAS International Conference on Humanoid Robots 2013.
- [62] Anuradha Ranasinghe, Prokar Dasgupta, Jaques Penders, Kaspar Althoefer, Thrishantha Nanayakkara, "An Optimal State Dependent Haptic Guidance Controller Via a Hard Rein", in 2013 IEEE International Conference on system, man, cybernetics (SMC), Manchester, UK, pp. 2322 - 2327, 2013 (DOI: 10.1109/SMC.2013.397).
- [63] A. Jiang, T. Aste, P. Dasgupta, K. Althoefer, and T. Nanayakkara, "Granular jamming with hydraulic control", ASME 2013 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference (IDETC 2013), Portland, OR, USA, 2013.
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- [65] A. Jiang, P. Agrawal, K. Althoefer, T. Nanayakkara, P. Dasgupta, , "Bio-inspired connective granular jamming for a robotic limb", 35th International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC 2013), Osaka, Japan, 2013.
- [66] A. Jiang, K. Althoefer, P. Dasgupta, T. Nanayakkara, "The Core-Snake, the variable stiffness laparoscopic camera", The Hamlyn Symposium on Medical Robotics, London, United Kingdom, 2013.
- [67] Thrishantha Nanayakkara, Katie Byl, Hongbin Liu, Xiaojing Song, and Tim Villabona. "Dominant sources of variability in passive walking", In IEEE International Conference on Robotics and Automation (ICRA), 2012 , pp. 1003-1010. IEEE, 2012 (DOI: 10.1109/ICRA.2012.6224839).
- [68] A. Jiang, G. Xynogalas, P. Dasgupta, K. Althoefer, and T. Nanayakkara, "Design of a variable stiffness flexible manipulator with composite granular jamming and membrane coupling", IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2012), pp. 2922-2927, Vilamoura, Portugal, 2012 (DOI: 10.1109/IROS.2012.6385696).
- [69] A. Jiang, J. Bimbo, S. Goulder, H. Liu, X. Song, and T. Nanayakkara, "Adaptive grip control on an uncertain object", IEEE/RSJ International Conference on Intelligent Robots and Systems

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