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Selected Scholarly Contributions [Data Provided by Scopus]

Ranasinghe, A., Sornkarn, N., Dasgupta, P., Althoefer, K., Penders, J., Nanayakkara, T.  
Salient Feature of Haptic-Based Guidance of People in Low Visibility Environments Using Hard Reins  

Chathuranga, D.S., Wang, Z., Noh, Y., Nanayakkara, T., Hirai, S.  
Robust real time material classification algorithm using soft three axis tactile sensor: Evaluation of the algorithm  

Chathuranga, D.S., Wang, Z., Noh, Y., Nanayakkara, T., Hirai, S.  
Disposable soft 3 axis force sensor for biomedical applications  

Escudero Morland, M.F., Althoefer, K., Nanayakkara, T.  
Novel method to form adaptive internal impedance profiles in walkers  

Ranasinghe, A., Dasgupta, P., Althoefer, K., Nanayakkara, T.  
Identification of haptic based guiding using hard reins  

Using visual cues to enhance haptic feedback for palpation on virtual model of soft tissue  
González-Fierro, M., Hernández-García, D., Nanayakkara, T., Balaguer, C.

Behavior sequencing based on demonstrations: A case of a humanoid opening a door while walking

González-Fierro, M., Balaguer, C., Swann, N., Nanayakkara, T.

A humanoid robot standing up through learning from demonstration using a multimodal reward function

Li, M., Luo, S., Nanayakkara, T., Seneviratne, L.D., Dasgupta, P., Althoefer, K.

Multi-fingered haptic palpation using pneumatic feedback actuators

Song, X., Liu, H., Althoefer, K., Nanayakkara, T., Seneviratne, L.D.

Efficient break-away friction ratio and slip prediction based on haptic surface exploration

Masinghe, W.D., Nanayakkara, T., Collier, G.

Upper limb joint torque distribution resulting from the flat tennis serve impact force

Konstantinova, J., Li, M., Mehra, G., Dasgupta, P., Althoefer, K., Nanayakkara, T.

Behavioral characteristics of manual palpation to localize hard nodules in soft tissues
(2014) IEEE Transactions on Biomedical Engineering, 61 (6), art. no. 6698327, pp. 1651-1659.


Novel uniaxial force sensor based on visual information for minimally invasive surgery
González-Fierro, M., Balaguer, C., Swann, N., Nanayakkara, T.
**Full-body postural control of a humanoid robot with both imitation learning and skill innovation**

Zheng, M., Sadati, S.M.H., Ghalamchi, P., Nanayakkara, T.
**Passive dynamics of high frequency bat wing flapping with an anisotropic membrane**
(2014) 2014 7th International Conference on Information and Automation for Sustainability:
"Sharpening the Future with Sustainable Technology", ICIAfS 2014, art. no. 7069582.

Konstantinova, J., Jiang, A., Althoefer, K., Dasgupta, P., Nanayakkara, T.
**Implementation of tactile sensing for palpation in robot-assisted minimally invasive surgery: A review**

Cotugno, G., Mohan, V., Althoefer, K., Nanayakkara, T.
**Simplifying grasping complexity through generalization of kinaesthetically learned synergies**

**Endoscopic add-on stiffness probe for real-time soft surface characterisation in MIS**

Calinon, S., Bruno, D., Malekzadeh, M.S., Nanayakkara, T., Caldwell, D.G.
**Human-robot skills transfer interfaces for a flexible surgical robot**

Sornkarn, N., Howard, M., Nanayakkara, T.
**Internal impedance control helps information gain in embodied perception**
**Endoscopic add-on stiffness probe for real-time soft surface characterisation in MIS**  

**Bio-inspired tactile sensor sleeve for surgical soft manipulators**  

Jiang, A., Adejokun, S., Faragasso, A., Althoefer, K., Nanayakkara, T., Dasgupta, P.  
**The granular jamming integrated actuator**  

Konstantinova, J., Li, M., Aminzadeh, V., Althoefer, K., Nanayakkara, T., Dasgupta, P.  
**Evaluating manual palpation trajectory patterns in tele-manipulation for soft tissue examination**  

Takai, A., Alanizi, N., Kiguchi, K., Nanayakkara, T.  
**Prototyping the flexible solenoid-coil artificial muscle, for exoskeletal robots**  

Ranasinghe, A., Penders, J., Dasgupta, P., Althoefer, K., Nanayakkara, T.  
**A two party haptic guidance controller via a hard rein**  
Konstantinova, J., Li, M., Aminzadeh, V., Dasgupta, P., Althoefer, K., Nanayakkara, T.  
*Force-velocity modulation strategies for soft tissue examination*  

Ranasinghe, A., Althoefer, K., Nanayakkara, T., Penders, J., Dasgupta, P.  
*An optimal state dependent haptic guidance controller via a hard rein*  

Pereno, V., Shoar, K., Bartoli, G., Bianchi, F., Nanayakkara, T.  
*Stable walking on variable visco-elastic terrains using meta-parameters for passive state migration*  

Li, M., Luo, S., Seneviratne, L.D., Nanayakkara, T., Althoefer, K., Dasgupta, P.  
*Haptics for multi-fingered palpation*  

Malekzadeh, M.S., Bruno, D., Calinon, S., Nanayakkara, T., Caldwell, D.G.  
*Skills transfer across dissimilar robots by learning context-dependent rewards*  

Taylor, J.G., Cutsuridis, V., Hartley, M., Althoefer, K., Nanayakkara, T.  
*Observational Learning: Basis, Experimental Results and Models, and Implications for Robotics*  

Jiang, A., Aste, T., Dasgupta, P., Althoefer, K., Nanayakkara, T.  
*Granular jamming transitions for a robotic mechanism*  
Wijesundera, I., Halgamuge, M.N., Nirmalathas, T., Nanayakkara, T.  
**A geographic primitive-based Bayesian framework to predict cyclone-induced flooding**  

Jiang, A., Aste, T., Dasgupta, P., Althoefer, K., Nanayakkara, T.  
**Granular jamming with hydraulic control**  

Jiang, A., Ataollahi, A., Althoefer, K., Dasgupta, P., Nanayakkara, T.  
**A variable stiffness joint by granular jamming**  

Godage, I.S., Nanayakkara, T., Caldwell, D.G.  
**Locomotion with continuum limbs**  

**Adaptive grip control on an uncertain object**  

Wijesundera, I., Halgamuge, M.N., Nirmalathas, T., Nanayakkara, T.  
**A computationally efficient framework for stochastic prediction of flood propagation**  

**Gait pattern analysis of an Asian elephant**  
Masinghe, W., Collier, G., Ordys, A., Nanayakkara, T.  
A novel approach to determine the inverse kinematics of a human upper limb model with 9 degrees of freedom  

Jiang, A., Xynogalas, G., Dasgupta, P., Althoefer, K., Nanayakkara, T.  
Design of a variable stiffness flexible manipulator with composite granular jamming and membrane coupling  

Adaptive internal impedance control for stable walking on uncertain visco-elastic terrains  

Penders, J., Jones, P., Nanayakkara, T.  
Exploring haptic interfacing with a mobile robot without visual feedback  

Liu, H., Song, X., Nanayakkara, T., Seneviratne, L.D., Althoefer, K.  
A computationally fast algorithm for local contact shape and pose classification using a tactile array sensor  

Nanayakkara, T., Byl, K., Liu, H., Song, X., Villabona, T.  
Dominant sources of variability in passive walking  
Nanayakkara, T., Halgamuge, M.N., Sridhar, P., Madni, A.M.
**Intelligent sensing in dynamic environments using markov decision process**

Welihinda, S.M., Abeyratne, M.G.A.P., Udawatta, L., Nanayakkara, T.
**Stable bipedal ramp climbing with torso**

**Portable acoustic device for detection of coconut palms infested by Rynchophorus ferrugineus (Coleoptera: Curculionidae)**

Hewapathirana, N.D., Uddawatta, L., Karunadasa, J.P., Nanayakkara, T.
**Analysis on four legged multipurpose rope climbing robot**

Sing, G.C., Joiner, W.M., Nanayakkara, T., Brayanov, J.B., Smith, M.A.
**Primitives for Motor Adaptation Reflect Correlated Neural Tuning to Position and Velocity**

Nanayakkara, T., Piyathilaka, J.M.L.C., Siriwardana, A.P., Subasinghe, S.A.A.M., Jamshidi, M.
**Orchestration of advanced motor skills in a group of humans through an elitist visual feedback mechanism**

Sridhar, P., Nanayakkara, T., Madni, A.M., Jamshidi, M.
**Dynamic power management of an embedded sensor network based on actor-critic reinforcement based learning**
De Silva, A., Jayathilake, M., Galgомуwa, A., Peiris, S., Udawatta, L., Nanayakkara, T.
High performance temperature controller for infant incubators

Bernardine Dias, M., Ayorkor Mills-Tettey, G., Nanayakkara, T.
Robotics, education, and sustainable development

Nanayakkara, T., Watanabe, K., Kiguchi, K., Izumi, K.
Evolving a multiobjective obstacle avoidance skill of a seven-link manipulator subject to constraints

Nanayakkara, T., Shadmehr, R.
Saccade Adaptation in Response to Altered Arm Dynamics

Kiguchi, K., Nanayakkara, T., Watanabe, K., Fukuda, T.
Multi-dimensional reinforcement learning using a vector Q-net - Application to mobile robots

Nanayakkara, D.P.T., Watanabe, K., Kiguchi, K., Shadmehr, R.
Intelligent control of a 7-DOF manipulator based on model primitives

Ariff, G., Donchin, O., Nanayakkara, T., Shadmehr, R.
A real-time state predictor in motor control: Study of saccadic eye movements during unseen reaching movements
Nanayakkara, D.P.T., Watanabe, K., Kiguchi, K., Izumi, K.

Evolutionary learning of a fuzzy behavior based controller for a nonholonomic mobile robot in a class of dynamic environments

Nanayakkara, D.P.T., Kiguchi, K., Murakami, T., Watanabe, K., Izumi, K.
Skillful adaptation of a 7-DOF manipulator to avoid moving obstacles in a teleoperated force control task

Nanayakkara, T., Watanabe, K., Kiguchi, K., Izumi, K.
Controlling multi-link manipulators by fuzzy selection of dynamic models

Nanayakkara, Thrishanta, Watanabe, Keigo, Izumi, Kiyotaka
Evolving Runge-Kutta-Gill RBF networks to estimate the dynamics of a multi-link manipulator