**IEEE Awards**

***2011 IEEE Robotics and Automation Technical Field Award***

* **Hirochika Inoue*,*** Professor Emeritus of the University of Tokyo, Japan: *For original and continuous contributions to research in intelligent robotics, in particular to real-time vision and humanoid robotics.*

***2011 IEEE Fellows***

**Evaluated by Robotics and Automation Society:**

* **Karl Bohringer**, University of Washington, USA: *For contributions to microelectromechanical systems, parallel and distributed robotic manipulation, and self-assembly.*
* **Bruce Donald**, Duke University, USA: *For contributions in robotics, microelectromechanical systems, and computational molecular biology.*
* **Pierre Dupont**, Children's Hospital Boston and Harvard Medical School, USA: *For contributions to modeling and control of frictional contact in robotics.*
* **Maja Mataric**, University of Southern California, USA: *For contributions to robot coordination and learning in human-robot systems.*
* **Yoshihiko Nakamura**, The University of Tokyo, Japan: *For contributions to robotics.*
* **Bradley Nelson,** Swiss Federal Institute of Technology – ETH Zurich, Switzerland: *For contributions to nano- and micro-scale robots and systems.*
* **Allison Okamura**, Johns Hopkins University, USA: *For contributions to the design and control of haptic systems and medical robotics.*
* **Leyuan Shi,** University of Wisconsin-Madison, USA: *For contributions to nested partitions optimization methodology.*
* **Gaurav Sukhatme,** University of Southern California, USA: *For contributions to multi-robot systems.*
* **Masaru Uchiyama**, Tohoku University, Japan: *For contributions to design, modeling, and control of robotic structures.*
* **Manuela Veloso**, Carnegie Mellon University, USA: *For contributions to the development of cognition, perception, and action in autonomous robot teams.*
* **Louis Whitcomb**, Johns Hopkins University, USA: *For contributions to the theory and application of robotics for intervention in extreme environments.*

**RAS members evaluated by other societies:**

* **Wen Jung Li**  (Nanotechnology Society) The Chinese University of Hong Kong, China: *For contributions in low-power integrated nanotube sensors and devices.*
* **Subhas Mukhopadhyay**, (Instrumentation and Measurement Society), Massey University, New Zealand:*For development of low-cost smart sensors and sensing systems.*
* **Laurence Simar,** (Signal Processing Society), Rice University, USA: *For leadership in digital signal processor architecture.*

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**IEEE Robotics and Automation Society Awards**

**RAS Publication Awards**

***2010 King-Sun Fu Memorial IEEE Transactions on Robotics Best Paper Award:***

* *Design and Control of Concentric-Tube Robots*; **Pierre E. Dupont, Jesse Lock, Brandon Itkowitz, and Evan Butler;** IEEE Trans. on Robotics; Vol. 26, No. 2, April 2010, Pages: 209 - 225.

 ***2010 IEEE Transactions on Automation Science and Engineering Best Paper Award:***

*To be presented at the 2011 IEEE Conference on Automation Science and Engineering (IEEE-CASE),* August 24-27 2011, Trieste, Italy

***2010 Googol T-ASE Best New Application Paper Award:***

*To be presented at IEEE-CASE 2011*

**RAS Achievement, Service, and Leadership Awards**

*The awards below are presented by the Robotics and Automation Society to recognize outstanding technical achievement, service and leadership. Recipients will be announced at the Awards Ceremony. We encourage all members to consider nominating outstanding candidates.  While the March 1 deadline for the 2012 nominations is nearly a year off, it is not too early to begin thinking of good candidates.  A description of each of the awards along with appropriate nomination forms can be found on the Society website at http://www.ieee-ras.org/awards.*

* ***Pioneer in Robotics and Automation Award***
* ***Distinguished Service Award***
* ***Saridis Leadership Award***
* ***Early Career Award in Robotics and Automation***
* ***Inaba Technical Award for Innovation Leading to Production***
* ***Chapter of the Year Award***
* ***Most Active Technical Committee Award***
* ***IEEE Robotics and Automation Award for Product Innovation***

***(est. 2010)***

***IEEE/IFR Invention and Entrepreneurship Award***

*The recipient of this award which is cosponsored by IEEE-RAS and the International Federation of Robotics was chosen at the IEEE/IFR Joint Forum on Innovation and Entrepreneurship in Robotics and Automation held May 9 and presented at the ICRA Opening Ceremony.*

**RAS Special Recognition**

*The Society recognizes the Officers, AdCom Members, and Senior Editors whose terms expired in 2010. Their dedication and hard work is greatly appreciated.*
***AdCom Members***

* **Peter Corke\***
* **Alessandro De Luca**
* **Lynne Parker**
* **Martin Buss (2010 only)\***
* **Shigeki Sugano\***
* **Satoshi Tadokoro**
* **Roland Siegwart (2010 only)**
* **Stefano Stramigioli (2008-2009)**

\*reelected for 2011-2013 term

**ICRA2011 Awards**

*The following awards are presented to one of the selected finalists listed below for each category. In the event of multiple winners, the prize is shared.*

***Best Manipulation Paper (Endowed by Ben Wegbreit)***

* Characterization of Oscillating Nano Knife for Single Cell Cutting by Nanorobotic Manipulation System inside ESEM: **Yajing Shen, Masahiro Nakajima, Seiji Kojima, Michio Homma,** and **Toshio Fukuda**
* Wireless Manipulation of Single Cells using Magnetic Microtransporters: **Mahmut Selman Sakar, Edward B. Steager, Anthony Cowley, Vijay Kumar,** and **George J Pappas**
* Hierarchical Task and Motion Planning in the Now: **Leslie Pack Kaelbling**, and **Tomás Lozano-Pérez**
* Selective Injection and Laser Manipulation of Nanotool inside a Specific Cell Using Optical pH Regulation and Optical Tweezers: **H. Maruyama, N. Inoue, T. Masuda,** and **F. Arai**
* Configuration-based Optimization for Six Degree-of-Freedom Haptic Rendering for Fine Manipulation: **Dangxiao Wang, Xin Zhang, Yuru Zhang**, and **Jing Xiao**

**ICRA2011 Awards - *continued***

***Best Vision Paper (Endowed by Ben Wegbreit)***

* Model-Based Localization of Intraocular Microrobots for Wireless Electromagnetic Control: **Christos Bergeles, Bradley E. Kratochvil**, and **Bradley J. Nelson**
* Fusing Optical Flow and Stereo in a Spherical Depth Panorama Using a Single-Camera Folded Catadioptric Rig: **Igor Labutov, Carlos Jaramillo**, and **Jizhong Xiao**
* 3-D Scene Analysis via Sequenced Predictions over Points and Regions: **Xuehan Xiong, Daniel Munoz, J. Andrew Bagnell**, and **Martial Hebert**
* Fast and Accurate Computation of Surface Normals from Range Images: **Hernán Badino, Daniel Huber**, and **Takeo Kanade**
* Sparse Distance Learning for Object Recognition Combining RGB and Depth Information: **Kevin Lai, Liefeng Bo, Xiaofeng Ren**, and **Dieter Fox**

***Best Automation Paper***

* Automated Cell Manipulation: Robotic ICSI: **Zhe Lu, Xuping Zhang, Clement Leung, Navid Esfandiari, Robert F. Casper,** and **Yu Sun**
* Efficient AUV Navigation Fusing Acoustic Ranging and Side-scan Sonar: **Maurice F. Fallon, Michael Kaess, Hordur Johannsson**, and **John J. Leonard**
* Vision-based 3D Bicycle Tracking using Deformable Part Model and Interacting Multiple Model Filter: **Hyunggi Cho, Paul E. Rybski**, and **Wende Zhang**
* High-Accuracy GPS and GLONASS Positioning by Multipath Mitigation using Omnidirectional Infrared Camera: **Taro Suzuki, Mitsunori Kitamura, Yoshiharu Amano**, and **Takumi Hashizume**
* Deployment of a Point and Line feature Localization System for an Outdoor Agriculture Vehicle: **Jacqueline Libby**, and **George Kantor**

***Best Medical Robotics Paper (Spons. by Intuitive Surgical)***

* Design of Adjustable Constant-force Forceps for Robot-Assisted Surgical Manipulation: **Chao-Chieh Lan**, and **Jung-Yuan Wang**
* Design Optimization of Concentric Tube Robots Based on Task and Anatomical Constraints: **Chris Bedell, Jesse Lock, Andrew Gosline**, and **Pierre E. Dupont**
* GyroLock – A Novel Approach for Active Heart Stabilization Using Control Moment Gyro (CMG): **Julien Gagne, Olivier Piccin, Édouard Laroche, Michele Diana**, and **Jacques Gangloff**
* Metal MEMS Tools for Beating-heart Tissue Approximation: **Evan J. Butler, Chris Folk, Adam Cohen, Nikolay Vasilyev, Rich Chen, Pedro del Nido**, and **Pierre E. Dupont**
* An Articulated Universal Joint Based Flexible Access Robot for Minimally Invasive Surgery: **J. Shang, D.P. Noonan, C. Payne, J. Clark, A. Darzi**, and **G.-Z. Yang**

***Best Conference Paper***

* Trajectory Generation and Control for Quadrotors in 3D, Dynamic Environments: **Daniel Mellinger**, and **Vijay Kumar**
* Autonomous Multi-Floor Indoor Navigation with a Computationally Constrained MAV: **Shaojie Shen, Nathan Michael**, and **Vijay Kumar**
* Dexhand : a Space qualified multi-fingered robotic hand: **Maxime Chalon, Armin Wedler, Andreas Baumann, Wieland Bertleff, Alexander Beyer, Joerg Butterfaß, Markus Grebenstein, Robin Gruber, Franz Hacker, Erich Kraemer, Klaus Landzettel, Maximilian Maier, Hans-Juergen Sedlmayr, Nikolaus Seitz**, **Fabian Wappler, Bertram Willberg, Thomas Wimboeck, Frederic Didot**, and **Gerd Hirzinger**
* Time Scales and Stability in Networked Multi-Robot Systems: **Mac Schwager, Nathan Michael, Vijay Kumar**, and **Daniela Rus**
* Bootstrapping Bilinear Models Of Robotic Sensorimotor Cascades: **Andrea Censi**, and **Richard M. Murray**

***KUKA Service Robotics Best Paper***

* Distributed Coordination and Data Fusion for Communication-limited Underwater Search: **Geoffrey A. Hollinger, Srinivas Yerramalli, Sanjiv Singh, Urbashi Mitra**, and **Gaurav S. Sukhatme**
* Dynamic Shared Control for Human-Wheelchair Cooperation: **Qinan Li, Weidong Chen**, and **Jingchuan Wang**
* Towards Joint Attention for a Domestic Service Robot – Person Awareness and Gesture Recognition using Time-of-Flight Cameras: **David Droeschel, Jörg Stückler, Dirk Holz**, and **Sven Behnke**
* Electromyographic Evaluation of Therapeutical Massage Effect Using Multi-finger Robot Hand: **Ren C. Luo**, and **Chih C. Chang**

***Best Video***

* Catching Flying Balls and Preparing Coffee: Humanoid Rollin’ Justin Performs Dynamic and Sensitive Tasks: **Berthold Bäuml, Florian Schmidt, Thomas Wimböck, Oliver Birbach, Alex Dietrich, Matthias Fuchs, Werner Friedl, Udo Frese, Christoph Borst, Markus Grebenstein, Oliver Eiberger**, and **Gerd Hirzinger**
* Recent Advances in Quadrotor Capabilities: **Daniel Mellinger, Nathan Michael, Michael Shomin** and **Vijay Kumar**
* High Performance Magnetically Driven Microtools with Ultrasonic Vibration for Biomedical Innovations: **Masaya Hagiwara, Tomohiro Kawahara, Lin Feng, Yoko Yamanishi,** and **Fumihito Arai**

***Best Cognitive Robotics Paper (Sponsored by CoTeSys)***

* Donut as I do: Learning from failed demonstrations: **Daniel H Grollman**, and **Aude Billard**
* A Discrete Computational Model of Sensorimotor Contingencies for Object Perception and Control of Behavior: **Alexander Maye**, and **Andreas K. Engel**
* Skill Learning and Performance Prediction for Manipulation: **Peter Pastor, Mrinal Kalakrishnan, Sachin Chitta, Evangelos Theodorou**, and **Stefan Schaal**
* Integrating Visual Exploration and Visual Search in Robotic Visual Attention: The Role of Human-Robot Interaction: **Momotaz Begum**, and **Fakhri Karray**

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**2011 IEEE International Conference on**

**Robotics and Automation**

**Awards Ceremony**

**Thursday, May 12, 2011**

**Shanghai International Conference Center**

**Shanghai, China**

*ICRA2011 General Chair:*

**Zexiang Li**, Hong Kong University of Science &Technology

*ICRA2011 Program Chair:*

**Yuan Fang Zheng**, Ohio State University

*ICRA2011 Awards Chair:*

**Li-Chen Fu,** National Taiwan University

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*President, IEEE Robotics and Automation Society:*

**Kazuhiro Kosuge**, Tohoku University

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