New RAS Chapters Formed

We are pleased to announce the formation of the following new Robotics and Automation Society (RAS) Chapters:

- IEEE Puebla (Mexico) Section RAS Chapter chair: Amparo Palomino Merino
- IEEE Tunisia Section Systems, Man and Cybernetics, and Robotics and Automation Joint Societies Chapter chair: Adel M. Alimi
- IEEE North New Zealand, Central New Zealand, and South New Zealand Joint Sections RAS Chapter chair: Xiaoqi Chen
- IEEE Universidad de las Americas-Puebla RAS Student Branch Chapter advisor: Jose L. Vazquez Gonzalez and chair: C. Zapata

Honors

Stergios Roumeliotis Receives U.S. PECASE Award

RAS member Stergios Roumeliotis has been awarded the prestigious Presidential Early Career Award for Scientists and Engineers (PECASE). The award is the United States' highest honor recognizing outstanding early career researchers who show exceptional potential.

Roumeliotis, an associate professor of computer science and engineering at the University of Minnesota, was honored on 19 December at a White House ceremony for the 67 researchers, whose work is deemed of critical importance to the future of the United States.

Roumeliotis specializes in inertial navigation of aerial and ground autonomous vehicles, fault detection and identification, and sensor networks. His research could be used in wheeled Mars rovers, tracked vehicles, as well as unmanned helicopters and spacecrafts. The applications of his research span from indoors to outdoors and from autonomous landing to planetary exploration.

Winners of the PECASE receive up to five years of funding from their nominating agency to further their research in support of critical government missions.

Shigeo Hirose Receives Engelberger Robotics Award

RAS member Shigeo Hirose of the Tokyo Institute of Technology was one of the two robotic pioneers presented with the 2009 Engelberger Robotics Award. Hirose was presented the award in the category of technology development. He is a leader in the field of creative design of robotic mechanisms such as snake-like, walking, wall climbing,

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crawler, and swarm-type robots. He has also done extensive research on robots for demining, rescue, medical, and planetary rovers. He has been actively developing and researching robotics technology for more than two decades. In addition to being a professor at the Tokyo Institute of Technology since 1992, he has been the director of the Super Mechano-System Innovation and Development Center at Tokyo Tech since 2006. He has received more than 50 academic prizes for his work, including the Purple Ribbon Medal from the Japanese government and the IEEE's Pioneer in Robotics and Automation Award.

The other recipient of this year's award was Robin Felder of the University of Virginia School of Medicine States, who received the award for leadership.

Robotics Handbook Wins Two AAP PROSE Awards

The *Springer Handbook of Robotics*, edited by Bruno Siciliano and Oussama Khatib, has won two PROSE awards presented by the American Association of Publishers (AAP), Professional and Scholarly Publishing Division. On 5 February, in Washington, DC, less than nine months after its publication, the handbook was recognized with the PROSE Award for Excellence in the physical sciences and mathematics category and with an award in the engineering and technology category.

These awards recognize the efforts all the editors, part editors, and authors have devoted to this challenge, with their contributions, commitment, and passion and can be well seen as a tribute to robotics as an established scientific field. The handbook was also the Springer's best-selling title in engineering in 2008.

Both Siciliano, the current RAS president, and Khatib are active members of the RAS, as are many of the contributors, some of whom are shown at the official launch of the handbook in Pasadena during the IEEE International Conference on Robotics and Automation (ICRA) 2008.

◆ Conduct research into how best to educate robotics engineers. Right now, it is a wide open question.

Conclusions

Robotics as an undergraduate discipline has several things going for it. First of all is need. The multidisciplinary education that robotics embodies is sorely needed. Second is student interest. Robotics resonates with young people. Finally, robotics is almost certainly the next new growth industry. Relatively low barriers to entry and a large range of opportunities for new products are ideal recipes for garage start-up companies. Thus, we do not just seek to train men and women who have the technical skills to design and build robotic systems but to educate innovators who will have the imagination to shape our world. No engineering discipline will be in a better position to do so in the 21st century than robotics engineering.

Michael A. Gennert is the head of the CS Department and the director of the Robotics Engineering Program at WPI.

Grétar Tryggvason is the head of the ME Department and associate director of the Robotics Engineering Program at WPI.
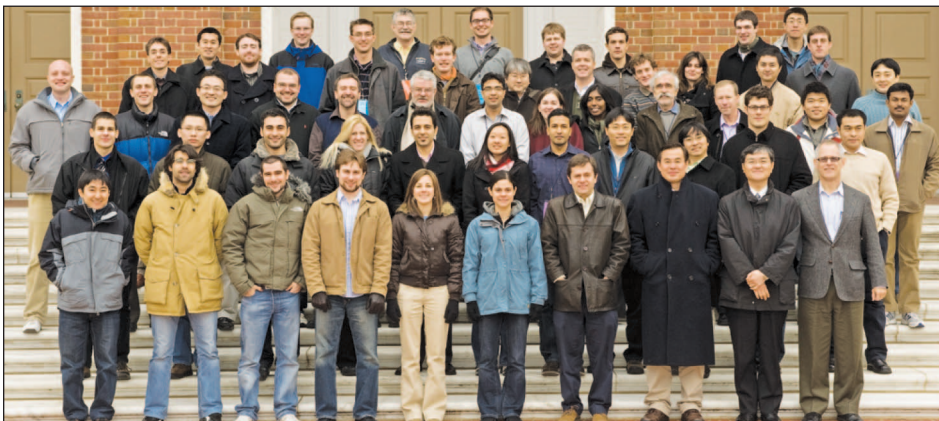
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SOCIETY NEWS

Some of the editors and authors of the Springer Robotics Handbook. Most, if not all of those pictured here are members of the RAS.

Students and faculty of Winter School on Medical Robotics and Computer-Integrated Interventional Systems.

Winter Robotics School Held at Johns Hopkins

This past January, the National Science Foundation (NSF) Computer-Integrated Surgical Systems Technology Engineering Research Center (CISST ERC) hosted the Winter School on Medical Robotics and Computer-Integrated Interventional Systems at Johns Hopkins University. During this week-long program, 19 internationally recognized faculties and 38 students from around the world participated in an intensive week-long short course that provided an introduction to the basic technology, systems, and research themes in the emerging field of medical robotics and computer-integrated interventional systems. As part of the IEEE RAS/IFRR School of Robotic Sciences program, the IEEE–RAS provided financial support for the 35 RAS Student Members who participated in the course. Support was also provided by the NSF. Further information may be found on the School's Web site at http://www.cisst.org/wiki/MRCIIS.