



Shuzhi Sam Ge, Professor, FIEEE, PhD, DIC, BSc, PEng
Director of Social Robotics Lab, Interactive Digital Media Institute &
Supervisor of Edutainment Robotics Lab, Department of Electrical and
Computer Engineering
The National University of Singapore
Tel:6516 6821, Fax: 6779 1103, Office: E4-05-28
E-mail: samge@nus.edu.sg, <http://robotics.nus.edu.sg>

MAJOR RESEARCH INTERESTS

Devoted to robotics alive, artificial intelligence, intelligent control and applications, intelligent and interactive digital media fusion, the research group has strong research linkages with research institutes in Singapore, leading research groups overseas, as well as with the industry.

Current projects include:

1. Social Robotics and Edutainment Robotics
2. Artificial Intelligence and Sensor Fusion
3. Intelligent Control Theory and Applications
4. Intelligent and Interactive Digital Media Fusion
5. Control Applications: Hard Disk Drives, Unmanned Vehicles, Flexible Systems for Off Shore Engineering.

RECENT REPRESENTATIVE PUBLICATIONS

- [1] S.S. Ge, T.H. Lee and C.J. Harris, Adaptive Neural Network Control of Robotic Manipulators, World Scientific, London, December 1998.
- [2] S. S. Ge, C. C. Hang, T.H. Lee and T. Zhang, Stable adaptive Neural Network Control, Boston, MA: Kluwer, 2001.
- [3] Z. Sun and S. S. Ge, Switched Linear Systems: Control and Design, Springer Verlag, London, 2005.
- [4] S.S. Ge and F.L. Lewis, Editors, Autonomous Mobile Robots: Sensing, Control, Decision-Making, and Applications, CRC Press, Taylor and Francis Group, Boca Raton, FL, 2006.
- [5] S.S. Ge, X.D. Chen, and X.Y. Han, "Interactive e-Book System", International PCT Application No. PCT/SG2006/000052, NUS reference number, GE SZ 05-PCT, 2005.
- [6] S.S. Ge, F. Hong and T.H. Lee, "Adaptive neural control of nonlinear time-delay systems with unknown virtual control coefficients," IEEE Transactions on Systems, Man, and Cybernetics, 2003.
- [7] Y. J. Cui and S.S. Ge, "Autonomous Vehicle Positioning with GPS in Urban Canyon Environments", IEEE Transactions on Robotics Automation, Vo. 19, no. 1, pp. 15-25, Feb., 2003.
- [8] S.S. Ge and C. Wang, "Adaptive Neural Control of Uncertain MIMO Nonlinear Systems," IEEE Transactions on Neural Networks, Vol. 15, No. 3, pp.674-692, 2004.
- [9] S.S. Ge and K.P. Tee, "Approximation-Based Control of Nonlinear MIMO Time-Delay Systems", Automatica, Vol. 43, no. 1, pp. 31-43, January 2007.