



[Mechanical Engineering](#) > UCHIBORI Akihiko



UCHIBORI Akihiko

Organization	Mechanical Engineering
Position	Associate Professor
Academic Title	Doctor(Engineering)
Research Fields	Information Processing, Robotics

<< Research Subjects >>

1. [Autonomous robot, Intelligent robot](#)
2. [Control and measurement for pneumatic equipment](#)
3. [Optimization of software agent using Genetic Algorithms](#)

<< Academic Activities >>

Papers and Notes

1. [Kanya TANAKA, Akihiko UCHIBORI, Kazuo HARUYAMA, Yuki NISHIMURA, Shigeru UCHIKADO, Faridah Abd Rahman : "Safety Confirmation System Using Ultrasonic Radar for Elderly People Living Alone", The transactions of the Institute of Electrical Engineers of Japan. D, A publication of Industry Applications Society 131\(2\), 202-207, \(2011\)](#)
2. [Kanya TANAKA, Yusuke MURATA, Yuki NISHIMURA, Abd Rahman Faridah, Masato OKA, Akihiko UCHIBORI : "Variable Gain Type PID Control using PSO for Ultrasonic Motor", Journal of The Japan Society of Applied Electromagnetics and Mechanics, Vol.18, No.3, pp.294-299 \(2010\)](#)
3. [Kazuo HARUYAMA, Kanya TANAKA, Shigeki KOBAYASHI, Katsunori YASUOKA, Akihiko UCHIBORI, Masato OKA : "Development of Getting Up Detection and Report Device using Power Line Communication and Mat-Sensor", The transactions of the Institute of Electrical Engineers of Japan. D, A publication of Industry Applications Society 126\(11\), 1507-1513, \(2006\)](#)
4. [Kanya TANAKA, Masato OKA, Akihiko UCHIBORI, Youichirou IWATA, Hiroshi ORIOKA : "Precise Position Control of an Ultrasonic Motor Using the PID Controller Combined with NN", Electrical Engineering in Japan, Vol.146, No.3, pp.46-54 \(2004\)](#)
5. [Masato OKA, Kanya TANAKA, Akihiko UCHIBORI, Akihiro NAGANAWA, Hiroshi MORIOKA, Yuji WAKASA : "Precise Position Control of the Ultrasonic Motor Using the Speed Compensation Type NN Controller", Transactions of the The Japan Society of Mechanical Engineers \(C\), Vol.70, No.694, pp.171-177 \(2004\)](#)
6. [Kazuhiro Takeshita, Akihiko Uchibori, Yoshiyuki Mizukami, Taiji Satho, Kanya Tanaka : " A Communication System for ALS patients using eye blink ", International Journal of Applied Electromagnetics and Mechanics 18, pp.3-10 \(2003\)](#)

Presentations

1. [Masato Oka, Kanya Tanaka, Akihiko Uchibori, Youichirou Iwata, Hiroshi Morioka, Toshitaka Oki : "Precise Position Control of Ultrasonic Motor Using PID Control with NN", Proceedings of the International Symposium on Advanced Control of Industrial Processes, Kumamoto\(Japan\), Jun. 9-12 \(2002\)](#)
2. [Toshitaka Oki, Kanya Tanaka, Toru Yamamoto, Akihiko Uchibori, Masato Oka : "IEEE A Design of Non-linear Electro-pneumatic Servo Systems by Using Neural-net Based Linearizer with Off-line Learning Algorithm", Proceedings of the International Joint Conference on Neural Networks, Honolulu \(USA\), May. 12-17 \(2002\)](#)
3. [Akihiko Uchibori, Masato Oka, Taiji Satho, Kanya Tanaka : "The Convergency of GA for Neural Network ", Proceedings of International Symposium on Artificial Life and Robotics, pp.757-760, Kumamoto\(Japan\), Jan. \(2000\)](#)
4. [Kanya Tanaka, Yuji Yamada, Taiji Satho, Akihiko Uchibori, Shigeru Uchikado : "Model Reference Adaptive Control with Multi-Rate Type Neural Network for Elector-Pneumatic Servo System ", Proceedings of the 1999 IEEE International Conference on Control Applications, Aug. \(1999\)](#)
5. [Taiji Satho, Akihiko Uchibori, Kanya Tanaka : "Artificial Life System for Optimization of Nonconvex Functions ", 1999](#)

- [International Joint Conference on Neural Networks, Jul. \(1999\)](#)
6. [Akihiko UCHIBORI, Keiichi MIYAJIMA, Yasunari SHIDAMA, Hiroo YAMAURA : "The Convergency of GA for Fuzzy Logic", Proc. of SECOND INTERNATIONAL CONFERENCE ON KNOWLEDGE-BASED INTELLIGENT ELECTRONIC SYSTEMS \(KES'98\), pp. 126-131, Adelaide \(Australia\), Apr. \(1998\)](#)
 7. [Akihiko UCHIBORI, Hiroshi YAMAZAKI, Yasunari SHIDAMA, Hiroo YAMAURA, Hiromi KOBAYASHI : "The Convergency of Optimizing Fuzzy Logic with GA", Proc. of the First Asia-Pacific Conference on Simulated Evolution and Learning \(SEAL'96\), S2-3 pp.91-97, \(South Korea\), Nov. \(1996\)](#)
 8. [Akihiko UCHIBORI, Hiroshi YAMAZAKI, Yasunari SHIDAMA, Hiroo YAMAURA : "An Optimizing Fuzzy Logic with Generic Algorithm", 1996 IEEE 3rd International Conference on Evolutionary Computation \(ICEC'96\) pp. 239-242, \(Japan\), May. \(1996\)](#)
 9. [Akihiko UCHIBORI, Y.SHIDAMA, Y. OSHITANI, H. YAMAURA, K. YUDA : "A Study of the Convergency of GA For Fuzzy Logic", Proc. of the 1st Magneto-Electronics International Symposium \(NAGANO magel '94\), pp. 457-460, Nagano \(Japan\), Nov.\(1994\)](#)
 10. [Yasumasa YOSHITANI, Yasunari SHIDAMA, Akihiko UCHIBORI : "Sequential Compacctness of the Family of Fuzzy Membership Functions", Proc. of the 1st Magneto-Electronics International Symposium \(NAGANO magel '94\), pp. 473-476, Nagano \(Japan\), Nov.\(1994\)](#)