



CURRICULUM VITAE

Kostas N. Tarchanidis

I. PERSONAL DETAILS

Name : **Kostas N. Tarchanidis**

Date of birth : 30th March 1964

Place of birth : Kalochoi - Kastorias - Greece

Mailing Address : Dept. of Petroleum and Mechanical Engineering
School of Engineering
East Macedonia and Thrace Institute of Technology
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Marital Status : Married – 2 children

Title : Professor

Position : Deputy President of the University Council

II. Studies

1. Electrical Engineering (Diploma) – Democritus University of Thrace

– grade Very Good (7.86/10.0)

2. Ph.D. in Robotics, Dpt of Electrical Eng. & Electronics – University of Liverpool - Gr. Britain

II. Teaching Experience

1. 1990-92 Lab demonstration to the 1st year students of the Engineering Science Dept. , Liverpool University – Gr. Britain
5. 1995 Lecturer for “Electrical Circuits & Machines” (2nd Semester) and “Automation” (6th Semester) - Dpt of Industrial Mechanical Engineering , University of Thessaly - Greece
- 7 1996-1998 Teaching Supervisor to Higher National Diploma and First Award Dpts of Dewburry College and FASMA school in Xanthi-Greece
- 8 2/1997 - 2000 Lecturer for “Digital Systems and Computers I” (6th Semester) – Dpt of Electrical and Computer Engineering – Democritus University of Thrace - Greece
- 9 1997 Lecturer for “Mechanical Design using Computer” (2nd Semester), Dpt of Industrial Mechanical Engineering , University of Thessaly - Greece
- 10 1998- Today “Electrical Circuits” (1st semester), "Basic Electronics" (2nd Semester), "Control I" 3rd Semester' Εξάμ.), “Control II” 4th Semester, Dept. of Petroleum & Natural Gas Technology, Kavala Institute of Technology - Greece

IV. WORK AND RESEARCH EXPERIENCE

A. Work Experience

1. 1986 Training Engineer in Public Telephone Company – Thessaloniki - Greece
2. 1987 Training Engineer in Public Power Company– Thessaloniki - Greece
3. 1988 Training Engineer in WYSTEK Electric Machine company – Poznan – Poland.
4. 1989 – 1998 Electrical Engineer – Consulting
5. 2/3/93- 28/2/95 Military Service: Second Lieutenant – Telecommunication Expert

6. 1989 – 1998 Custom designs of digital systems and boards using microcontrollers/microprocessors
7. 1995-1998 Co-founder of Lamda Electronics Inc. High technology Applications. The company specializes in the industrial sector to robotics, automation, process control-modeling, software, telemetry and instrumentation. It has been subsidized by the Development Law 1892/90 (FEK 38024/28-11-95) as a high technology company.

B. Research and Teaching Positions

1. 1989 Ph.D. student – Liverpool University – Gr. Britain
2. 1995 Lecturer – Dpt of Industrial Mechanical Engineering – University of Thessaly – Greece
3. 1997 Lecturer – Dpt of Industrial Mechanical Engineering – University of Thessaly – Greece
4. 1997- Today Lecturer – Dpt of Electrical & Computer Engineering – Democritus University of Thrace – Greece
5. 1998 – 2007 Ass. Professor – Dpt. of Petroleum & Natural Gas Technology – Kavala Institute of Technology – Greece
6. 2007-today Professor – Dpt. of Petroleum & Natural Gas Technology – Kavala Institute of Technology – Greece

C. Administration Position

1. 1999 – 2001 Representative of the Assistant Professors to the Council of the Dept. of Petroleum & Natural Gas Technology – Kavala Institute of Technology
2. 2001 – 2003 Head of Department of Petroleum & Natural Gas Technology – Kavala Institute of Technology
3. 2003- Today Dean of Engineering School – Kavala Institute of Technology

D. Research Projects

1. 4/1989-9/1989 Research Engineer E.U. research project "ESPRIT", Project leader

- Prof. Chris Georgopoulos – Democritus University of Thrace - Greece
2. 1989-1992 Research Engineer to the E.U. research project "MAST I" Project Leader Prof. J. Lucas, University of Liverpool – Gr. Britain
 3. 1990-1992 Research Engineer to the British SERC project "ENTECH" Project Leader Prof. J. Lucas, University of Liverpool – Gr. Britain
 4. 17/4/96-31/8/98 Young Researcher to the Greek G.S.R.D. «Small dimension radiation detector using VLSI circuits» Project Leader Lecturer G. Bakos – Democritus University of Thrace - Greece
 5. 1996-1999 Project Leader Assistant to the MED CAMPUS research network
 6. 1/3/97-28/2/99 PostDoc researcher E.U. research project “High speed laser cutting based on vision system for complicated design in cloth industry” BRITE-EURAM, Project Leaders Prof. N. Tsagas and Ass. Prof. J. Lygouras
 7. 1997-1998 Project Leader to the Development Project LEADER II, "Microwave Dryer for tobacco and other vegetables " (Lamda Inc.)
 8. 1/7/99-9/11/99 Researcher to the Project “Jamming system against Pulsed Doppler Radar» Project Leader Ass. Prof. G. Kyiakoy – Democritus University of Thrace – Greece
 9. 1/12/99-1/9/2001 Project Leader to the PABET «Automated metal surface hardening system» G.S.R.D.
 10. 1/11/2001-30/4/2003 Project Leader to the PABET «Wireless Data Logger» G.S.R.D.

E. Publications

a. Ph. D. Thesis:

"Kinematics for Modular Robots".
Dept. of Electrical Engineering and Electronics, University of Liverpool, Gr. Britain, (1992).

b. Journals

- 1 **Tarchanidis K.**, Mackay A.S, Lucas J., "Flexible Kinematics for Modular Robots" *Microprocessors and Microsystems*, Vol. 19, No.9, pp.525-532, 1995
- 2 I. Seftelis, S. Trasanidis, **K. Tarchanidis***, G. Bakos, N. Tsagas " Variations of gross alpha, beta air radioactivity correlated with air temperature and humidity", *Hadronic Journal*, Vol. 18, no. 3, pp.237-244, 1995 , (*) Corresponding author.

- 3 Lygouras J., Tsagas N., Bakos G., **Tarchanidis K.** and Tsalides P. "Remotely Operated Vehicle (ROV) Position Control by Implementation of Modern Control Theory Techniques", *Modelling Measurement & Control*, B, AMSE Press, Vol. 59, No.3, 1995, pp. 5-14
- 4 J.N. Lygouras, **K.N. Tarchanidis** "Non-linear circuit cancels the non-linearity of a DC motor ", *Int. J. of Electronics*, 1998, Vol.84, No. 2, pp 147-156
- 5 J.N. Lygouras, **K.N. Tarchanidis** "Suspended sediment and dye concentration measurements using a digital technique", *Int. J. of Electronics*, 2000, Vol. 87, No1, pp107-118
6. **Tarchanidis K.N.**, Lygouras J.N., "Data Glove with a Force Sensor", *IEEE Journal of Instrumentation and Measurement*, Vol. 52, Num.3, June 2003, pp. 984-989.
7. A. Christoforides, N. Kanellopoulos, A. Mitropoulos, K.L. Stefanopoulos and **K. Tarchanidis**, "Characterization of controlled pore glasses by small angle x-ray scattering and evaluation of the scattering data by the indirect Fourier transformation method", *CHARACTERIZATION OF POROUS SOLIDS VI - STUDIES IN SURFACE SCIENCE AND CATALYSIS*,144: 769-774 2002, Elsevier,
8. Pachidis T., **Tarchanidis K.**, Lygouras J. and Tsalides P., "Robot Path Generation Method for a Welding System Based on Pseudo Stereo Visual Servo Control," *EURASIP Journal on Applied Signal Processing*, Vol. 2005, No. 14, 11 August 2005
9. Lygouras J.N., Kodogiannis V.S., Pachidis Th., **Tarchanidis K.N.** and Koukourlis C.S., "Variable structure TITO fuzzy-logic controller implementation for a solar air-conditioning system", [*Applied Energy*, Volume 85, Issue 4](#), April 2008, Pages 190-203
10. D. Badekas, N. Vordos, **Tarchanidis K.N.**, L. Magafas, G. Tsirigotis "Optimum Selection based on the Energy Capacity between Different Types of Renewable Sources using a Controller", *Electronics and Electrical Engineering* 2007.No. 8(80), pp 9-12
11. Pachidis T, Lygouras J.N. and **Tarchanidis K.N.**, "HumanPT : An Open-source, HumanPT Architecture-based, Robotic Application for Low Cost Robotic Tasks", *Journal of Intelligent and Robotic Systems*, Volume 51, Number 4 / April, 2008, pp. 385-420
12. Pachidis T, Lygouras J.N. and **Tarchanidis K.N.**, "Adaptive High-Performance Velocity Evaluation Based on High Resolution Time-to-Digital Converter", *IEEE Transactions on Instrumentation and Measurements*, 57(9) 2008 , pp. 2035-2043
13. **Tarchanidis K.N.**, Soilemes A.T., "Digitally Synthesized Alternative Current Sinusoidal Waveform for Resistive Sensor Measurements", *Journal of Engineering Science and Technology Review* 4 (1) (2011) 50-54
14. **Tarchanidis K.N.**, Lygouras J.N., P. Botsaris, "Voltage Stabilizer Based on SPWM technique Using Microcontroller", *Journal of Engineering Science and Technology Review* 6 (1) (2013) 38-43
15. **Tarchanidis K.N.**, Lygouras J.N., Pachidis Th., Tarchanidis J.N., "PUMA Internet Task Logging Using the IDAC-1", *Journal of Engineering Science and Technology Review* 7 (3) (2014) 188– 191

c. Conferences

- 1 Lygouras J., Tsagas N., Bakos G., Tarchanidis K. and Tsalides P. "Remotely Operated Vehicle (ROV) Position Control by Implementation of Modern Control Theory Techniques", International AMSE Conference, Systems, Control & Design, SYS'94, Lyon (France), July 1994.
- 2 Bakos G. C., Tsagas N.F., Lygouras J. N, Tarchanidis K.N. and Micholitsis G., "Development of a Sonar System For ROV Positioning". AMSE , Intern. Confer. "Information Processing Methodologies & Applications", New Orleans (USA), Nov. 9-11 1994
- 3 Tarchanidis K.N., Lygouras J.N., Sarafis I.T., "A New Residual Vector for Fast Converging Iterative Algorithm Solving the Inverse Kinematics Problem", AMSE SYS '90, July 3-5, 1995.
- 4 Lygouras J.N., Tarchanidis K.N., Kakkalis J.K., Dimitriadis C. " DC motor linearisation", Workshop on Developments in Industrial Control Systems, 3-5 Oct. 1996, Thessaloniki
- 5 Tarchanidis K.N., Lygouras J.N. "Communication Interface Between Transputer and the PUMA robot", ICARCV'96, Singapore 3-6 Dec. 1996
- 6 Lygouras J.N., Tarchanidis K.N., Tsalides Ph., "THETIS An underwater Remotely Operated Vehicle", OCCEANS96/MTS/IEEE, 23-26 Sept. 1996, Ft. Lauderdale, Florida, USA
- 7 Lygouras J.N., Tarchanidis K.N. "High resolution optical suspended sediment detector" IASTED, 22 Feb. 1996, Innsbruck- Austria
- 8 Tarchanidis K.N., Lygouras J.N., "A Hybrid Neural Network/ Newton-Raphson Algorithm Solving the Inverse Kinematics Problem", IASTED Int. Conference, Control and Applications (CA'2000), May 24-27, Cancun, Mexico, pp.236-245
- 9 Tarchanidis K.N., Ioannidis I., Kakkalis I., Lygouras J.N., « FLEXIMAT, an Integrated System Scanning the Bedding of Any Mattress», Int. Workshop on Virtual and Intelligent Measurements Systems VIMS 2000, 29-30 April, MD, USA, pp.115-120
- 10 Tarchanidis K.N., Sarafis E., Lygouras J.N., « Multisegment Snake-like Manipulator», IASTED Int. Conf. Robotics and Applications, RA2000, August 14-16 2000, Honolulu, Hawaii, USA, pp. 264-269
- 11 Sarafis E.T, Tarchanidis K.N., Lygouras J.N., «Automation of underwater tasks using an electrically driven manipulator», Proceedings of the IASTED International Conference Robotics and Applications 2000 August 14-16, 2000 – Honolulu, Hawaii, USA, pp. 24-28
- 12 Tarchanidis K.N., Lygouras J.N., "Data Glove with a Force Sensor", Proceedings of the 18th IEEE Instrumentation and Measurement Technology Conference, Budapest, 21-23 May, 2001, pp 380-385

- 13 Lygouras J.N., Tarchanidis K.N., Tsalides Ph., "A Digital Optical-Fiber Finger Blood Volume Meter", Proceedings of the 18th IEEE Instrumentation and Measurement Technology Conference, Budapest, 21-23 May, 2001, pp 648-653
- 14 Tarchanidis K.N., Koukourlis Ch., "Digital Alternative Sinusoidal Current Waveform for Virtual Resistance Measurements" Proceedings of the VIMS 2001, International Workshop on Virtual and Intelligent Measurement Systems, Budapest, 19-20 May, 2001, pp. 52-56
- 15 Christoforides A., Kanellopoulos N., Mitropoulos A., Stefanopoulos K.L. and Tarchanidis K.N., "Characterization of controlled pore glasses by small angle x-ray scattering and evaluation of the scattering data by the indirect Fourier transformation method", Proceedings of the 6th Int. Symposium on the Characterization of Porous Solids (COPS-VI), Alicante, Spain, May 8-11, 2002
- 16 Tarchanidis K.N., Lygouras J.N., Chatziandreoglou Ch., "Internet Task Logging Using the IDAC-1", IWSSIP 2002, Manchester, November 7-8, 2002
- 17 Tarchanidis K.N., Lygouras J.N., Chatziandreoglou Ch., "Closed Loop Control Through Internet Using the IDAC-1", IEEE Instrumentation and Measurement Technology Conference 2003, Vail, CO, USA, 20-22 May 2003
18. Tarchanidis K.N., Pachidis T., Lygouras J.N., Koutras J.K., "Remote Robot Task Monitoring Using the IDAC-1", IEEE Instrumentation and Measurement Technology Conference 2006, Sorrento, Italy, April 2006.
19. [Tarchanidis, K.N.](#), [Lygouras, J.N.](#), [Pachidis, T.](#), [Kodogiannis, V.](#), [Chatziandreoglou, C.G.](#) "PH neutralization through Internet ", 2006 Proceedings of 2006 IEEE International Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems, VECIMS 2006, art. no. 4016654, pp. 19-23
20. [Pachidis, T.](#), [Tarchanidis, K.](#), [Lygouras, J.](#) "Apparatus based experimental study of physics phenomena» 2006 Proceedings of 2006 IEEE International Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems, VECIMS 2006, art. no. 4016673, pp. 102-107
21. [Pachidis, T.](#), [Lygouras, J.](#), [Tarchanidis, K.](#), [Kodogiannis, V.](#) "HumanPT: Architecture for low cost robotic applications" 2006 Proceedings of 2006 IEEE International Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems, VECIMS 2006, art. no. 4016685, pp. 154-159

d. Citations

1. Lygouras J.N., " DC Thruster Controller Implementation with Integral Anti-Windup Compensator for Underwater ROV", Int. Journal of Intelligent Robotic Systems, 25: pp. 79-94, 1999 **REFERENCE TO JOURNAL PAPER#4**

2. Pachidis, T.P.,, «Robot arm path control in real time using Pseudo-Stereo », Ph.D. Thesis, Democritus University of Thrace, Dpt of Electrical Engineering, Xanthi 2005. [REFERENCE TO JOURNAL PAPER#8](#)
3. Pachidis, T.P.,, «Robot arm path control in real time using Pseudo-Stereo », Ph.D. Thesis, Democritus University of Thrace, Dpt of Electrical Engineering, Xanthi 2005.. [REFERENCE TO JOURNAL PAPER#9](#)
4. Lale Korkmaz, “Static Force Production Analysis in a 3D Musculoskeletal Model of the Cat Hindlimb”, Master Thesis, Woodruff School of Mechanical Engineering, Georgia Institute of Technology, March 2004 [REFERENCE TO JOURNAL PAPER#1](#)
5. Pachidis, T.P., Lygouras, J.N.« Vision-based path generation method for a robot-based arc welding system» 2007 Journal of Intelligent and Robotic Systems: Theory and Applications 48 (3), pp. 307-331
[REFERENCE TO CONFERENCE PAPER #20](#)
6. D. Koutsantoni, “Attitude, certainty and allusions to common knowledge in scientific research articles”, *Journal of English for Academic Purposes*, 3 (2004) pp. 163-182. [REFERENCE TO JOURNAL PAPER#4](#)
7. Tenth position (10) θέση in “the top 25 hottest articles” of Applied Energy of Elsevier, from January to March 2008. [REFERENCE TO JOURNAL PAPER#10](#)
8. Lin J., Lian R.-J., “[Hybrid fuzzy-logic and neural-network controller for MIMO systems](#)”, *Mechatronics*, Vol. 19, issue 6, 2009, pp. 972 – 986. [REFERENCE TO JOURNAL PAPER#10](#)
9. [Zhang J.](#), [Shi P.](#) and [Xia Y.](#), “Robust Adaptive Sliding-Mode Control for Fuzzy Systems With Mismatched Uncertainties”, *IEEE Transactions on Fuzzy Systems*, Vol. 18, [Issue 4](#), August 2010, pp. 700 – 711. [REFERENCE TO JOURNAL PAPER#10](#)
10. [Fu Y.](#), [Liu H.](#), [Yan, Z.](#),and [Wang S.](#), “[Dynamic simulation research on a 2-DOF catheter robot](#)”, *Chinese High Technology Letters*, Vol. 20 (6), 2010, pp. 602-607. [REFERENCE TO JOURNAL PAPER#10](#)
11. Bulut H. and Aktacir M.A., “[Determination of free cooling potential: A case study for Istanbul, Turkey](#)”, *Applied Energy*, In Press, Corrected Proof, Available online 23 September 2010 [REFERENCE TO JOURNAL PAPER#10](#)
12. D. Koulouriotis, D, Emiris, and E. Christodoulou, “ Iterconnection System between PC and PUMA robot for real time path control”, *3rd Conference Technology and Automation*, 14-16 Oct. 2000, Piraeus. [REFERENCE TO CONFERENCE PAPER #5](#)

[REFERENCE TO JOURNAL PAPER#12](#)

13. Arif, S.J., Asghar, M.S.J., Sarwar, A., "Measurement of speed and calibration of tachometers using rotating magnetic field", 2014, "IEEE Transactions on Instrumentation and Measurement"

14. Kim, M., Shin, W.-Y., Hong, G.-M., Park, J., Chae, J.-H., Xing, N., Woo, J.-K., Kim, S., "High-resolution and wide-dynamic range time-to-digital converter with a multi-phase cyclic Vernier delay line", 2013, "European Solid-State Circuits Conference"
15. Rairan-Antolines, J.D., Fonseca-Gómez, J.M., "Algorithm to approximate the rotational speed of an axis by an incremental encoder [Algoritmo para la aproximación de la velocidad de giro de un eje mediante un encoder incremental]", 2013, "Ingeniería y Universidad"
16. Rairan Antolines, J.D., "An optimal algorithm for estimating angular speed using incremental encoders [Un algoritmo óptimo para la aproximación de la velocidad angular utilizando encoders]", 2013, "Ingeniería e Investigación"
17. Johnson, N., Mohan, K.J., Janson, K.E., Jose, J., "Optimization of incremental optical encoder pulse processing", 2013, "Proceedings - 2013 IEEE International Multi Conference on Automation, Computing, Control, Communication and Compressed Sensing, iMac4s 2013"
18. Mohan K., J., Johnson, N., "Devising Simulink Optical Encoder Pulse Manipulation and its Evaluation", 2012, "International Conference on Intelligent Systems Design and Applications, ISDA"
19. Wang, M.-S., Kung, Y.-S., Tu, Y.-M., Lin, T.-T., "Novel interpolation method for quadrature encoder square signals", 2009, "IEEE International Symposium on Industrial Electronics"

REFERENCE TO JOURNAL PAPER#11

20. Pachidis, T.P., Sarafis, I.T., Lygouras, J.N., "Vision system-based, grape leaves processing, in real time", 2010, "2010 IEEE International Conference on Imaging Systems and Techniques, IST 2010 - Proceedings"

REFERENCE TO JOURNAL PAPER#9

21. Koc, I., Parmaksizoglu, C., "Free cooling in the water cooling towers: A case study for Istanbul, Turkey", 2013, "Gazi University Journal of Science"
22. Qiu, J., Feng, G., Gao, H., "Observer-based piecewise affine output feedback controller synthesis of continuous-time T-S Fuzzy affine dynamic systems using quantized measurements", 2012, "IEEE Transactions on Fuzzy Systems"
23. Ha, Q.P., Vakiloroyaya, V., "A novel solar-assisted air-conditioner system for energy savings with performance enhancement", 2012, "Procedia Engineering"
24. Dexter, A.L., "Monitoring and Control of Information-Poor Systems: An Approach Based on Fuzzy Relational Models", 2012, "Monitoring and Control of Information-Poor Systems: An Approach Based on Fuzzy Relational Models"
25. Eahin, A.E., Kalogirou, S.A., "Soft computing in absorption cooling systems", 2011, "Studies in Fuzziness and Soft Computing"
26. Lin, J., Lian, R.-J., "Intelligent controller for multiple-input multiple-output systems - part I", 2011, "International Journal of Innovative Computing, Information and Control"
27. Patil, S.S., Bhaskar, P., Shrimanth Sudheer, L., "Design and implementation of an integrated fuzzy logic controller for a multi-input multi-output system", 2011, "Defence Science Journal"
28. Precup, R.-E., Hellendoorn, H., "A survey on industrial applications of fuzzy control", 2011, "Computers in Industry"
29. Bulut, H., Aktacir, M.A., "Determination of free cooling potential: A case study for Istanbul, Turkey", 2011, "Applied Energy"

30. Lygouras, J.N., Kodogiannis, V., "Design and implementation of a solarpowered air-conditioning system",2011,"Air Conditioning Systems: Performance, Environment and Energy Factors"
31. Nazir, M.B., Wang, S., "Optimized fuzzy sliding mode control to enhance chattering reduction for nonlinear electro-hydraulic servo system",2010,"International Journal of Fuzzy Systems"
32. Zhang, J., Shi, P., Xia, Y., "Robust adaptive sliding-mode control for fuzzy systems with mismatched uncertainties",2010,"IEEE Transactions on Fuzzy Systems"
33. Fu, Y., Liu, H., Yan, Z., Wang, S., "Dynamic simulation research on a 2-DOF catheter robot",2010,"Gaojishu Tongxin/Chinese High Technology Letters"
34. Lin, J., Lian, R.-J., "Hybrid fuzzy-logic and neural-network controller for MIMO systems",2009,"Mechatronics"
35. Zha F.X. and Chen X., "Path Coordination Planning and Control in Robotic Material Handling and Processing" Industrial Robotics: Programming, Simulation and Applications, pp. 231-254. REFERENCE TO JOURNAL PAPER#9

ΑΝΑΦΟΡΑ ΕΡΓΑΣΙΑ ΣΤΗΝ ΕΠ.ΣΥΝ. #21

36. Pachidis, T.P., Lygouras, J.N., "Vision-based path generation method for a robot-based arc welding system",2007,"Journal of Intelligent and Robotic Systems: Theory and Applications"

REFERENCE TO JOURNAL PAPER#8

37. Pachidis, T.P., Sarafis, I.T., Lygouras, I.N., "Real time feature extraction and Standard Cutting Models fitting in grape leaves",2010,"Computers and Electronics in Agriculture"

REFERENCE TO JOURNAL PAPER#6

38. Wang, J., Ting, Z., "An ARM-based embedded gesture recognition system using a data glove",2014,"26th Chinese Control and Decision Conference, CCDC 2014"
39. Melnyk, A., Henaff, P., Khomenko, V., Borysenko, V., "Sensor network architecture to measure characteristics of a handshake between humans",2014,"2014 IEEE 34th International Scientific Conference on Electronics and Nanotechnology, ELNANO 2014 - Conference Proceedings"
40. Huang, Y.-P., Wang, G.-Z., Chang, T.-S., Chen, T.-H., "Three-Dimensional virtual touch display system for multi-User applications",2013,"IEEE/OSA Journal of Display Technology"
41. Wang, G.-Z., Huang, Y.-P., Chang, T.-S., "Bare finger 3D air-touch system with embedded multiwavelength optical sensor arrays for mobile 3D displays",2013,"Journal of the Society for Information Display"
42. Borghetti, M., Sardini, E., Serpelloni, M., "Sensorized glove for measuring hand finger flexion for rehabilitation purposes",2013,"IEEE Transactions on Instrumentation and Measurement"
43. Fujiwara, E., Wu, Y.T., Miyatake, D.Y., Santos, M.F.M., Suzuki, C.K., "Evaluation of thumb-operated directional pad functionalities on a glove-based optical fiber sensor",2013,"IEEE Transactions on Instrumentation and Measurement"

44. Maundy, B., Gift, S.J.G., "Strain gauge amplifier circuits", 2013, "IEEE Transactions on Instrumentation and Measurement"
45. Tongrod, N., Lokavee, S., Watthanawisuth, N., Tuantranont, A., Kerdcharoen, T., "Design and development of data glove based on printed polymeric sensors and Zigbee networks for Human-Computer Interface", 2013, "Disability and Rehabilitation: Assistive Technology"
46. De Maria, G., Natale, C., Pirozzi, S., "Force/tactile sensor for robotic applications", 2012, "Sensors and Actuators, A: Physical",
47. D'Amore, A., De Maria, G., Grassia, L., Natale, C., Pirozzi, S., "Silicone-rubber-based tactile sensors for the measurement of normal and tangential components of the contact force", 2011, "Journal of Applied Polymer Science"
48. Szelitzky, E., Alutei, A.-M., Chetran, B., M^lAndru, D., "Data glove and virtual environment - A distance monitoring and rehabilitation solution", 2011, "2011 E-Health and Bioengineering Conference, EHB 2011"
49. Cui, L., Cupcic, U., Dai, J.S., "Kinematic mapping and calibration of the thumb motions for teleoperating a humanoid robot hand", 2011, "Proceedings of the ASME Design Engineering Technical Conference", "6", "PARTS A AND B"
50. Garcia-Robledo, P., Ortego, J., Ferre, M., Barrio, J., S^lnchez-Ur^ln, M.A., "Segmentation of bimanual virtual object manipulation tasks using multifinger haptic interfaces", 2011, "IEEE Transactions on Instrumentation and Measurement"
51. Paredes-Madrid, L., Emmi, L., De Santos, P.G., "Improving the performance of piezoresistive force sensors by modeling sensor capacitance", 2010, "IEEE International Symposium on Industrial Electronics"
52. Kang, S., Kim, J., Sohn, J., "A robot control approach based on multi-level data fusion", 2010, "ICCAS 2010 - International Conference on Control, Automation and Systems"
53. Tongrod, N., Tuantranont, A., Kerdcharoen, T., "Design and development of data-glove based on printed polymeric sensors and zigbee networks for human computer interface", 2010, "i-CREATe 2010 - International Convention on Rehabilitation Engineering and Assistive Technology"
54. Sun, H., Yu, Y., Chen, R., Ge, Y., "A signal conditioning and data acquisition system for micro/nano displacement sensor", 2010, "2010 IEEE International Conference on Robotics and Biomimetics, ROBIO 2010",
55. Paredes-Madrid, L., Torruella, P., Solaeche, P., Galiana, I., Gonzalez De Santos, P., "Accurate modeling of low-cost piezoresistive force sensors for haptic interfaces", 2010, "Proceedings - IEEE International Conference on Robotics and Automation"
56. Jung, S., Park, C., Bae, J., Moon, I., "A wearable interface for tendon-driven robotic hand prosthesis", 2010, "Journal of Institute of Control, Robotics and Systems"
57. Kang, S., Kim, J., Lee, J., "Intuitive control using a mediated interface module", 2009, "ACM International Conference Proceeding Series"
58. Park, C.-Y., Bae, J.-H., Moon, I., "Development of wireless data glove for unrestricted upper-extremity rehabilitation system", 2009, "ICCAS-SICE 2009 - ICROS-SICE International Joint Conference 2009, Proceedings"
59. Kim, J.-H., Thang, N.D., Kim, T.-S., "3-D hand motion tracking and gesture recognition using a data glove", 2009, "IEEE International Symposium on Industrial Electronics", ,, 5221998, "1013"
60. Dipietro, L., Sabatini, A.M., Dario, P., "A survey of glove-based systems and their applications", 2008, "IEEE Transactions on Systems, Man and

Cybernetics Part C: Applications and Reviews”

61. Lee, Y., Min, S., Yang, H., Jung, K., "Motion sensitive glove-based Korean fingerspelling tutor", 2007, "2007 International Conference on Convergence Information Technology, ICCIT 2007"
62. Min, S., Oh, S., Kim, G., Yoon, T., Lim, C., Lee, Y., Jung, K., "Simple glove-based Korean finger spelling recognition system", 2007, "Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)", "4705 LNCS", "PART 1"
63. Xu, Y., Li, W.J., Lee, "Intelligent Wearable Interfaces", 2007, "Intelligent Wearable Interfaces"
64. Ye, W., Xu, Y., Lee, K.K., "Shoe-Mouse: An integrated intelligent shoe", 2005, "2005 IEEE/RSJ International Conference on Intelligent Robots and Systems, IROS"
65. Lei, X., Dai, S., Mei, J., Zhang, J., "Study on virtual manipulation technology in virtual reality systems", 2005, "IFAC Proceedings Volumes (IFAC-PapersOnline)"
66. Fahn C.S. and Sun H., "[Development of a Data Glove with Reducing Sensors Based on Magnetic Induction](#)", *IEEE Transactions on Industrial Electronics*, Vol. 52, No. 2, pp. 585-594 April 2005.
67. Xiaoyong L., Shuling D., Jihong M. and Jin Z., "Study on Virtual Manipulation Technology in Virtual Reality Systems", [16th IFAC World Congress, Prague, July 4-8, 2005](#)
68. Li P.Y., Tan D.P., Liu G. and Ying M.Y., "Six-component Force Sensor and its Calibration System", *Proceedings of the IEEE Int. Conf. on Networking, Sensing and Control*, March 2005, pp. 889-893
69. Weizhong Y., Yangsheng X. and Ka Keung L., "Shoe-Mouse: an integrated intelligent shoe", *Proceedings of the IEEE Int. Conf. on Intelligent Robots and Systems*, (IRS '05), Aug. 2005, pp. 1163-1167
70. McEwan A.L. and Collins S., "Efficient, ROM-less DDFS using non-linear interpolation and non-linear DAC", *Analog Integrated Circuits and Signal Processing*, Vol. 48, Issue 3, Sept. 2006, pp. 231-237
71. Lei X., Dai S., Mei J. and Zhang J., "Study on Virtual Manipulation Technology in Virtual Reality Systems", *International ACM Symposium on Virtual Reality Software and Technology, VSRT' 97*.
72. Min S., Oh S., Kim G., Yoon T., Lim C., Lee Y. and Jung K., "Simple Glove-Based Korean Finger Spelling Recognition System", *Computational Science and its Applications*, Springer Ed., Vol. 4705, 2007, p. 1063-1073
73. Boukhenous S. and Attari M., "A Low Cost Grip Transducer Based Instrument to Quantify Fingertip Touch Force", *Proceedings of the 29th Annual Internat. Conference of the IEEE EMBS*, Lyon, France, Aug. 2007, pp. 4834-4837.
74. Yangsheng X., Wen J. Li and Ka Keung L., "Intelligent Shoes for Human-Computer Interface", *Intelligent Wearable Interfaces*, (Book), Wiley, 2007, pp. 56-87.

75. Lee Y., Min S., Yang H. and Jung K., "Motion Sensitive Glove-Based Korean Fingerspelling Tutor", *IEEE International Conference on Convergence Information Technology*, Nov. 2007, p. 1674-1677
76. L. Dipietro, A.M. Sabatini and P. Dario, "A Survey of Glove-Based Systems and Their Applications", *IEEE Trans. on Systems, Man and Cybernetics—PART C: Applications and Reviews*, Vol. 38, No. 4, July 2008, pp. 461-482.
77. R. Kvedaras, "Automatizuotu Skaitmenititiu Sistemu Maziems Pokyciams Invertiniti Tyrimas", *Department of Electrical and Electronic Engineering, Technical University of Vilnius, PhD Dissertation*, Vilnius 2005
78. [Kang S.](#), [Kim J.](#), [Lee J.](#), "Intuitive control using a mediated interface module", *ACM International Conference Proceeding Series* , 2009, pp. 435-436.
79. [Park C.-Y.](#), [Bae J.-H.](#), [Moon I.](#), "Development of wireless data glove for unrestricted upper-extremity rehabilitation system", *ICCAS-SICE 2009 - ICROS-SICE International Joint Conference 2009, Proceedings* , art. no. 5333064, 2009, pp. 790-793.
80. [Kim J.-H.](#), [Thang N.D.](#), [Kim T.-S.](#), "3-D hand motion tracking and gesture recognition using a data glove", *IEEE International Symposium on Industrial Electronics* , art. no. 5221998, 2009, pp. 1013-1018.
81. Paredes-Madrid L., Torruella P., Solaeche P., Galiana I. and Gonzalez de Santos P. "Accurate modeling of low-cost piezoresistive force sensors for haptic interfaces", 5509436 abstract *IEEE International Conference on Robotics and Automation (ICRA), 2010, May 2010*, pp. 1828–1833 Anchorage, AK.
82. Paredes-Madrid L., Emmi L. and De Santos P.G., "Improving the performance of piezoresistive force sensors by modeling sensor capacitance", *IEEE International Symposium on Industrial Electronics* , art. no. 5637681, 2010, pp. 458-463.
83. García-Robledo P., Ortego J., Ferre M., Barrio J. and Sánchez-Urán M.A., "Segmentation of bimanual virtual object manipulation tasks using multifinger haptic interfaces", *IEEE Transactions on Instrumentation and Measurement* 60 (1), art. no. 5567157, 2011, pp. 69-80.

REFERENCE TO CONFERENCE PAPER #12

84. Adnan, N.H., Wan, K., Shahrman, A.B., Zaaba, S.K., Basah, S.N., Razlan, Z.M., Hazry, D., Ayob, M.N., Nor, R.M., Aziz, A.A., "Measurement of the flexible bending force of the index and middle fingers for virtual interaction", 2012, "Procedia Engineering"
85. Fahn, C.-S., Sun, H., "Development of a fingertip glove equipped with magnetic tracking sensors", 2010, "Sensors"
86. Fahn, C.-S., Sun, H., "Development of a data glove with reducing sensors based on magnetic induction", 2005, "IEEE Transactions on Industrial Electronics"
87. S. Boukhenous and M. Attari, "A Low Cost Grip Transducer Based Instrument to Quantify Fingertip Touch Force", Proc. of the 29th Annual International

- Conference of the IEEE EMBS, Lyon, France, Aug. 2007. REFERENCE TO CONFERENCE PAPER #12
88. H. Sun, "The Development of Hand Tracking Sensors and Their Applications", National Technical University of Taiwan, Dept. of Electrical Engineering, Ph. D. Thesis, 2005
 89. [McEwan A.L.](#), [Collins S.](#), "Efficient, ROM-less DDFS using non-linear interpolation and non-linear DAC", [Analog Integrated Circuits and Signal Processing](#) 48 (3), 2006, pp. 231-237.
 90. Chia – Jung Hsu, "A feasibility study of wearable toe bending angles detecting devices", National University of Taiwan, Dept of Electrical Engineering, Master Thesis, 2004.
 91. "Hand-gesture recognition for interactive environments and applications", Bibliography, School of Computing, Computer Vision & ICSRIM University of Leeds.
 92. Zhang X., "Machine Learning of Human Behavioural Skills Through Observation", Master of Engineering Thesis, University of Wollongong, School of Electrical, Computer and Telecommunications Engineering, Australia

REFERENCE TO CONFERENCE PAPER #13

93. McEwan A.L. and Collins S., "Efficient, ROM-less DDFS using non-linear interpolation and non-linear DAC", *Analog Integrated Circuits and Signal Processing*, Vol. 48, Issue 3, Sept. 2006, pp. 231-237
94. Jobbagy A., Csordas P. and Mersich A., "Accurate Blood Pressure Measurement at Home", *Proceedings of MEDICON 2004, X Mediterranean Conf. on Medical and Biological Engineering and Computing*, 1-5 Aug. 2004, Ischia, Italy. (Paper no. 40. on CD-ROM. ISBN: 80-7780-30808.)
95. Jobbagy A., "Early Diagnosis and Objective Assessment of Patients with Neural and Cardiovascular Diseases", PhD dissertation, Department of Measurement and Information Systems, Budapest University of Technology and Economics, 2005.

REFERENCE TO JOURNAL PAPER#5

96. Kang, S.Q., Li, S.S., Zheng, S., Wu, D., "The design and implementation of high precision three-phase sine-wave signal generator", 2014, "Applied Mechanics and Materials"
97. Chen, Y., Yuan, Z., "Design of digital controlled signal generator based on DDS and MCU", 2012, "Advanced Materials Research"

REFERENCE TO JOURNAL PAPER#1

98. Shi, J., Zhou, D., Geng, J., Lv, C., "Research on flexible cables simulation based on CATIA/DELMIA", 2010, "Applied Mechanics and Materials"

