CV

Name and Surname

Zhenli Lu

Academic or scientific position

Dr. Associate Professor. Principle Investigator of **research group on robot intelligent control technology and its application and sub-direction of Mechanical engineering discipline on Key Technology of Human Robot Interaction for New Energy Intelligent car. Master Student** Advisor of China University of Mining and Technology, Yancheng Institute of Technology

Affiliation ：School of Electrical Engineering and Automation, Changshu Institute of Technology

Biography:

- 2023 June to Present, LU Zhenli is Talent Technology Advisor of Rudong Country,Nantong City, Jiangsu Province.

- 2019 to 2022, LU Zhenli is the director of Rudong Technology Transfer Centre, Changshu Institute of Tecnology

- 2018 to 2021, LU Zhenli is the vice director of Jiangsu Rudong Economic development Zone,Nantong City, Jiangsu Hi-Technology Zone, Juegang town.

- 2016-2019， LU Zhenli is Professional leader of robotics Engineering， Head of Department of Robotics Engineering

- 2013 to 2016, LU Zhenli holds a professor position in Changshu Institute of Technology, P.R.China.
- 2009-2014 he is a Post-doctoral Researcher in IEETA, University of Aveiro, Portugal. He is a CIENCIA 2007 fellow of FCT in Portugal.
- 2008-2009, he was a Post-doctoral Researcher funded by the FP7(Seventh Framework Programme) project (Cooperative Human Robot Interaction Systems(FP7-215805)) in the Stem Cell and Brain Research Institute Integrative Neuroscience& Robotics, INSERM U846, Lyon, France.
- 2002-2007, he studied for a Doctor of Engineering (Master-Docter combined program) degree from Shenyang Institute of Automation, Chinese Academy of Sciences, Shenyang, P. R.China, major in Mechatronic Engineering.
- 1997-2013 he holds a teacher position in Shenyang Ligong University, P.R.China.
- 1993-1997, he studied for a Bachelor of Engineering degree from Nanjing University of Science and Technology, Nanjing, P. R. China, major in Mechatronic Engineering.

- His current research interests include development of key robot technology for the agriculture application, robot assistant system for cerebral palsy rehabilitation, robot intelligent control, bio-inspired control methods for robots, mixed reality, human robot interaction.

- He has nearly 20 years' research experience on bio-inspired robot control. Relying on the project of the National Science Foundation of China "Study on the CPG based control methods for snake-like robots" and project of the National High Technology Research and Development Program – "863" Program, "Study on a Snake Robot Adapted to the Environment". He published more than 40 papers and nearly 10 patents. Most of papers are indexed by EI, ISTP, ISI and four papers are indexed by SCI. He was awarded the T. J. Tarn best robotics paper and Finalist for C. M. HO Best Paper award at 2005 IEEE International Conference on Robotics and Biomimetics, and the best paper award of the Chinese Journal of Mechanical Engineering in 2007. He won "Chunhui Project" funded by the Chinese Ministry of Education in 2010 and gave an invited report in 13th GuangZhou Convention of Overseas Chinese Scholars in Science and Technology. He served as Program Committee member in 2010 IEEE International Conference on Robotics and Biomimetics(ROBIO2010). He also served as a reviewer for IEEE IROS 2006, IEEE ROBIO 2005/2006/2007/2010/12/13,IEEE WCICA 2018, Zidonghua Xuebao/Acta Automatica Sinica, the Journal of Bionic Engineering and the IEEE Transactions on Control Systems Technology.

Awards

T. J. TARN Best Paper award in Robotics, 2005 IEEE International Conference on Robotics and Biomimetics (ROBIO 2005), July 2005 (Jinguo Liu, Shugen Ma, Zhenli Lu, Yuechao Wang, Bin Li, and Jing Wang: Design and Experiment of a Novel Link-Type Shape Shifting Modular Robot Series)

Finalist for C. M. HO Best Paper award in Biomimetics, 2005 IEEE International Conference on Robotics and Biomimetics (ROBIO 2005), July 2005 (Zhenli Lu, Shugen Ma, Bin Li, and Yuechao Wang: Design of a Snake-like Robot Controller With Cyclic Inhibitory CPG Model)

Best Paper Award, Chinese Mechanical Engineering Society, November 2007 (Zhenli Lu, Shugen Ma, Bin Li, and Yuechao Wang: Snake-like Robot Controller With Cyclic Inhibitory CPG Model)

Third Level of 2014 - 2015 Suzhou excellent academic papers of Natural Science Award, Suzhou science and Technology Bureau (Zhenli Lu, Bin Li: Dynamic simulation Performance analysis of serpentine swimming motion)

Third Level of 2015 Excellent Thesis of Jiangsu junior college graduation Award, Jiangsu Provincial Department of Education(Liu Chao, Design of a snake-like robot with environmental adaptability, Supervised by Zhenli Lu)

As a supervisor, his students won more than twenty kinds of Award in RobuCup Competitions.

Outstanding member of the Jiangsu Science and Technology Town Chief League in 2019,2020,2021 Award by Jiangsu Provincial Party Committee Organization Department.

Honorary member of the Jiangsu Provincial Science and Technology Town Mayor Group 2021 Award by Talent Office of the Organization Department of the Jiangsu Provincial Party Committee.

Talent Technology Advisor of Rudong Country,Nantong City, Jiangsu Province 2023 awards by the Organization Department of Rudong Country,Nantong City.

Oral Presentations:

A. Invited Reports

[A-1] Zhenli Lu, "The robotic intelligent control research group in IEETA, University of Aveiro", 13th GuangZhou Convention of Overseas Chinese Scholars in Science and Technology, 20-22 December, GuangZhou, CHINA (in Chinese).

[A-2] Zhenli Lu, "CPG Based Locomotion Control Methods for the Snake-like Robot", Chunhui Project invited report funded by the Chinese Ministry of Education in Changshu Institute of Technology, Changshu, China, December 27,2010 (in English).

B. Conference Paper Reports

[B-1] Zhenli Lu, "Locomotion of a Snake-like Robot Controlled by the Bidirectional Cyclic Inhibitory CPG Model," the 2006 IEEE International Conference on Robotics and Biomimetics (ROBIO'06), Kunming, China, December 17-20, 2006 (in English).

[B-2] Zhenli Lu, "Communication Mechanism Study of a Multi-Robot Planetary Exploration System," the 2006 IEEE International Conference on Robotics and Biomimetics (ROBIO'06), Kunming, China, December 17-20, 2006 (in English).

[B-3] Zhenli Lu, "3D Locomotion of a Snake-like Robot Controlled by Cyclic Inhibitory CPG Model," the 2005 IEEE International Conference on Intelligent Robotics and System (IROS'06), Beijing, China, October 9-15, 2006 (in English).

[B-4] Zhenli Lu, "Design and Experiment of a Novel Link-Type Shape Shifting Modular Robot Series," the 2005 IEEE International Conference on Robotics and Biomimetics (ROBIO'05), Hong Kong SAR and Macau SAR, June 29 – July 03, 2005 (in English).

[B-5] Zhenli Lu, "Design of a Snake-like Robot Controller With Cyclic Inhibitory CPG Model," the 2005 IEEE International Conference on Robotics and Biomimetics (ROBIO'05), pp.35-40, Hong Kong SAR and Macau SAR, June 29 – July 03, 2005

[B-6] Zhenli Lu, "Development of a Hybrid Humanoid Platform and Incorporation of the Passive Actuators," the 2010 IEEE International Conference on Robotics and Biomimetics (ROBIO'10), Tianjin, December 14-18, 2010 (in English).

[B-7] Zhenli Lu, ".A COP-based Controller Developed in YARP for Adaptive Motion Planning of a Single Leg robot," the 2012 IEEE International Conference on Robotics and Biomimetics (ROBIO'12), Guangzhou, December 11-14, 2012 (in English).

[B-8] Zhenli Lu, "Reproduction of Human Arm Movements Using Kinect-Based Motion Capture Data," the 2013 IEEE International Conference on Robotics and Biomimetics (ROBIO'13), Shenzhen, December 14-18, 2013 (in English).

[B-9] Zhenli Lu, "Design of Kinect-based Human Robot Interaction Systems for a RoboCup Middle Size League Soccer Robot",The 5th Annual IEEE International conference on Cyber Technology in Automation, Control and Intelligent Systems (Cyber-2015), June 8-12,2015,Shenyang,China. (in English).

[B-10] Zhenli Lu, "Modulation of Dynamic Movement Primitives for Biped Locomotion," ASSISTIVE ROBOTICS:the 18th International Conference on CLAWAR 2015 ,Hangzhou,China (in English).

C. Other Reports

[C-1] Zhenli Lu, "Bio-inspired Locomotion Control Methods for Robots", workshop of ATRI group in IEETA, University of Aveiro, 2009 (in English).

[C-2] Zhenli Lu, "Study on the motion control of snake-like robots on land and in water", workshop of joint CZECH - CHINESE SCIENTIFIC AND TECHNOLOGICAL COOPERATION, VSB Technical University of Ostrava, Czech Republic, 2015 (in English).

[C-3] Zhenli Lu, "Study of human-robot interaction - Use of robot as assistive technology for cerebral palsy rehabilitation", 2015 China (Shenyang) World Congress of Robotics (WCR-2015) ,Shenyang Hunnan Headquarters Center, China (in English).

EDUCATION

Ph.D . -   State Key Laboratory of Robotics, Shenyang Institute of Automation, Chinese
            Academy of Sciences(2002-2007).Thesis Title: "CI(Cyclic-Inhibitory)-CPG (Central
            Pattern Generator) based control method for snake-like robot" ,
            Major " Mechatronic engineering" , (Combined MA-PHD programme)

B.Sc. -   School of Manufacturing Engineering, Major " Mechatronic engineering" ,
             Nanjing University of Science and Technology,(1993- 1997).

PARTICIPATION IN NATIONAL PROJECTS

- „Study of Snake-like Robot with Environmental Adaptability " Project No. 2001AA422360 financed by the National Hi-tech Research and Development Plan of Ministry of Science and Technology of PR. of China for period 2002-2003 , the Project

Coordinator is Prof. Bin Li with Shenyang Institute of Automation, Chinese Academy of Sciences.

- „Study of CPG Control Method for Snake-like Robots" Project No. 60375029 financed by the National Natural Science Foundation of China for period 2003-2006, the Project Coordinator is Prof. Shugen Ma with Shenyang Institute of Automation, Chinese Academy of Sciences.

- **„Development of Self-walking Intelligent Straw Returning Field Rotary Tillage and Fertilization Joint Operating Machine" Project No. BE2014322 financed by Jiangsu provincial science and Technology Department Support plan (Agriculture),PR China for period 2014-2016, the Project Coordinator is Prof. Lanyu Yang with Changshu Institute of Technology.**

PARTICIPATION IN INTERNATIONAL PROJECTS

- „ Cooperative Human Robot Interaction Systems " Project No. 215805 financed by EC Seventh Framework Program theme FP7 IST for period 2008-2009, The overall goal of project is to address the fundamental issues which enable safe Human Robot Interaction (HRI).

- „ Robustness by Autonomous Competence Enhancement " Project No. 287752 financed by EC Seventh Framework Program theme FP7-ICT-2011-7 for period 2012-20013. The overall aim of this project is to develop an artificial cognitive system, embodied by a service robot, able to build a high-level understanding of the world it inhabits by storing and exploiting appropriate memories of its experiences. Experiences will be recorded internally at multiple levels: high-level descriptions in terms of goals, tasks and behaviours, connected to constituting subtasks, and finally to sensory and actuator skills at the lowest level. In this way, experiences provide a detailed account of how the robot has achieved past goals or how it has failed, and what sensory events have accompanied the activities.

COORDINATION OF NATIONAL PROJECT

- „MNSM-based Control Method Study for the High Efficiency and Mobility of Swimming Motion of Snake-like Robot " Project No. 2014-O08, funded by Open fund of State Key Laboratory of Robotics, Shenyang Institute of Automation, Chinese academy of Sciences, PR of China for period 2014-2017.

- „Bio-Inspired Robot platform Development and Control " Project No. XZ1306, funded by fund of Changshu Institute of Technology, PR of China for period 2013-2017.

COORDINATION OF INTERNATIONAL PROJECT

- „Study on intelligent motion control of bio-inspired robot "Project No. C2007-UA/IEETA/IR/01b, funded by Open fund of CIENCIA2007 program in the area of intelligent robot by FCT(Foundation of Science and Technology),R. of Portugal for period 2009-2014.

COORDINATION OF BILATERAL PROJECTS

- „ Study of human-robot interaction - Use of robot as assistive technology for cerebral palsy rehabilitation" The third regular meeting of the science and technology cooperation committee between China and Serbia , funded by the Ministry of Science and Technology of PR. of China for period of 2015-2017. In 2016, two sides finished the mutual-visiting tasks.

NON SCIENTIFIC PROJECT (TEMPUS, ERASMUS, IPA…)

- PI of Joint Lab between ABB robot company and Changshu Institute of Technology.

- PI of Intelligent Robot Lab of School of Electrical Engineering and Automation, Changshu Institute of Technology.

REWIEVER OF JOURNAL PAPERS

- Many times. He is the reviewer of Acta Automatica Sinica, Journal of Mechanical Engineering, Advanced Robotics, etc.

MEMBERSHIP IN THE PROGRAM COMMITTEES OF CONFERENCES

He was IEEE Membership,IEEE Robotics and Automation Society Membership, International Scientific Committee Member of a number of scientific conferences. The most recent include: Poster Sessions Co-Chair of IEEE International Conference on Robotics and Biomimetics, Dec. 3 – Dec. 7, 2016, Qingdao, China. Publications Co-Chair of IEEE International Conference on Robotics and Biomimetics, Dec. 7 – Dec. 11, 2011, Phuket, Thailand. Section Chair of IROS-2005, IROS-2006, ROBIO-2005, ROBIO-2006,ROBIO-2011,ROBIO-2012, CYBER-2015,etc.

MENTOR OF PHD STUDENTS

No, he is the Mentor of Master Students of China University of Mining and Technology.

- Kai Tian, Study on the Key Technology of Human Robot Interaction for the Competition between Human and Robot. (2013-2016), Master thesis defended at May, 2016.Supervised by Huigang Xu, Zhenli Lu

- Yafei Xie, Study on the control methods for under water snake-like robot. (2014-2017), Master thesis defended at May, 2017.Supervised by Huigang Xu, Zhenli Lu

- Cheng Zhang, Second year. He is working on the topic of „ Study of Control methods for industry robot“,Supervised by Zhenli Lu, Weidong Wang

- Zhipeng Ma, first year. He is working on the topic of „ Study of robot intelligent control key technologies“, Supervised by Zhenli Lu, Weidong Wang

BOOKS AND CHAPTERS

No

EDITOR OF JOURNALS, PROCEEDINGS AND BOOKS

No

THE TEN MOST IMPORTANT REFERENCES RELATED TO THE PROJECT

- Zhenli Lu, Shugen Ma, Bin Li, Yuechao Wang. Gaits-transferable CPG controller for a snake-like robot[J]. Science In China (F), 2008, 51(3):293-305.

- Zhenli Lu, Shugen Ma, Bin Li, Yuechao Wang. Design of a cyclic inhibitory CPG controller for the locomotion of a snakelike robot. Front. Mech. Eng. China (2006) 4: 396−402 Springer, DOI 10.1007/s11465-006-0046-7.

- Jinguo Liu, Shugen Ma, Zhenli Lu,Yuechao Wang, Bin Li and Jing Wang ,Design and Experiment of a Novel Link-Type Shape Shifting Modular Robot Series, , pp 318-323 , 2005 IEEE International Conference on Robotics and Biomimetics (ROBIO 2005), June 29-July 3,2005,Hongkong & Macco ,China .

- Zhenli Lu,Filipe Silva, Liwei Zhang and Huigang Xu, "Mirror Neuron System Mechanism Inspired Method for Dual-Arm Robot Symmetrical Motion Control", pp. 1341-1346, 2013 IEEE International Conference on Robotics and Biomimetics (ROBIO 2013) , Dec 11-14,2013, Shenzhen,China .

- Zhenli Lu, Stephane Lallee, Vadim Tikhanoff, Peter Ford Dominey. Bent Leg Walking Gait Design for Humanoid Robotic Child-iCub Based on Key State Switching Control. 2012 IEEE Symposium on Robotics and Applications (ISRA 2012), June 3-6 2012, pp 992-998 , Kuala Lumpur, Malaysia,2012.

- Zhenli Lu, Filipe Silva, Luis Seabra Lopes.A COP-based Controller Developed in YARP for Adaptive Motion Planning of a Single Leg robot. 2012 IEEE International Conference on Robotics and Biomimetics (ROBIO 2012), Dec 11-14. 2012, pp 42-47,Guangzhou, China, 2012

- Liwei Zhang, Sebastian Rockel, Federico Pecora, Lothar Hotz, Zhenli Lu, Denis Klimentjew, Jianwei Zhang, Evaluation Metrics for an Experience-based Mobile Artificial Cognitive System , 2013 IEEE International Conference On Intelligent Robots and Systems (IROS2013): Workshop on Metrics of Embodied Learning Processes in Robots and Animals, 2013.11.

- Zhenli Lu, Dayu Feng, Yafei Xie,Huigang Xu, Limin Mao,Changkao Shan, Bin Li, Petr Bilik, Radek Martinek, Zdenek Rykala, Study on the motion control of snake-like robots on land and in water, Perspectives in Science, DOI information: 10.1016/j.pisc.2015.11.017.

- Weiqing Ai , Zhenli Lu, Bin Li, Shumin Fei, Output Feedback control for a class of nonlinear system with actuator degradation and sensor noise, ISA Transactions, 65(2016) 44-50

- Zhenli Lu, Kai Tian, Huigang Xu , Jun Liu, Limin Mao, Shujun Liu, Changkao Shan and Bin Li , Design of Kinect-based Human Robot Interaction Systems for a RoboCup Middle Size League Soccer Robot,pp 1689-1874, The 5th Annual IEEE International conference on Cyber Technology in Automation, Control and Intelligent Systems (Cyber-2015), June 8-12,2015,Shenyang,China.

LIST OF SCIENTIFICS RESULTS IN LAST 5 YEARS (Start with the most recent and proceed to the oldest)

Journal papers

- Ai W., Lu Z., Li B., & Fei S. (2016). Output feedback control for a class of nonlinear systems with actuator degradation and sensor noise. Isa Transactions,65(2016) 44-50.

- Lu Z., Xie Y., Branislav B., & Li B. (2017). Simulation study on the motion of a Canfield joint type-based snake-like robot. Chinese High Technology Letters, 2017,(7):638-645 .(In Chinese with English abstract).

- Lu Z., Shen X.,Liu J., Zhang G., Sun H., Branislav, B., & Li, B. (2017). Design of voice interaction-based training system for cerebral palsy rehabilitation. Chinese High Technology Letters, 2017,(3):277-284.(In Chinese with English abstract).

- Lu Z., Xie, Y., Xu H., Liu J., Shan C., Branislav, B., & Li, B. (2017). Simulation research on turning motion of underwater snake- like robots. Chinese High Technology Letters, 2017,(9-10):840-847 .(In Chinese with English abstract).

- Lu Z., Tian K., Xu H.,Zhang C., Li B., Branislav, B., & Liu J., (2017). Design of a speech interaction system for man-machine confrontation. Chinese High Technology Letters, 2017,(5):457-463 .(In Chinese with English abstract).

- Lu Z., Xie Y., Zhou L., Shan C., Branislav B., & Li B. (2016). Design and implementation of a system for identifying and sorting cigarettes in case based on machine vision. Chinese High Technology Letters, 2016,(6):585-592 .(In Chinese with English abstract).

- Xie Y., Lu Z., Xu H., Branislav B., & Li B. (2016). Research on underwater snake-like robots' mechanism design and their serpentine swimming performance. Chinese High Technology Letters, 2016,(6):599-605. (In Chinese with English abstract).

- Dai J., Han H., Zhang X., Liu M., Wan S., Liu J., Lu Z. (2016). Catoptrical rough set model on two universes using granule-based definition and its variable precision extensions. Information Sciences.

- Lu Z., Feng D., Xie Y., Xu H., Mao L., & Shan C., et al. (2016). Study on the motion control of snake-like robots on land and in water. Perspectives in Science, 7(C), 101-108.

- Z Lu,C Liu,Y Xie，H Xu，C Shan , B Li, Using phase adjustment method to achieve snake-like robot's obstacle avoidance function, (2015) . Chinese High Technology Letters, 2015,(5):508-514. (In Chinese with English abstract).

- Zhenli Lu, Bin Li. Dynamic simulation Performance analysis of serpentine swimming motion[J]. Robot, 2015, 37(6):748-753. (In Chinese with English abstract).

- Kai Tian, Zhenli Lu, Huigang Xu,Qimin Gu, Limin Mao,Yong Chen, (2015), Recognition and Representation of Ball-passing Motion for a Middle Size League Soccer Robot[J],Chinese High Technology Letters. 2015, 25(6):614-621, (In Chinese with English abstract).

- LU Zhenli, Tang Pengfang, SHAN Changkao, Xu Xianzhen, LI Bin, (2015), Image Recognition-based Report System for Illegal Parking in Bus Stop[J],Chinese High Technology Letters, 2015,(10-11):964-970. (In Chinese with English abstract).

- LU Zhenli, SUN Kaixiang, FENG Dayu, XU Xianzhen, SHAN Changkao, LIUShujun, LI Bin, Design of Robot System for Typical Aspect of Labor-intensive Production Line, [J],Chinese High Technology Letters. 2015, 25(8):815-821 (In Chinese with English abstract).

- MAO Li-min, LU Zhen-li, AN Chang, LIU Shu-jun,Research on rehabilitation training robot for upper limbs, [J]. Manufacturing automation, 2017(2):65-69. (In Chinese with English abstract).

- Limin Mao,Zhenli Lu,Peiyi Zhu, Chenxi Wang, Design and Control of an Intelligent Robot for Campus Inspection[J]. Measurement & Control Technology, 2015, 34(1):84-86. (In Chinese with English abstract).

- Limin Mao,Zhenli Lu,Mingxin Xie,Yuhuan Pu, (2014). Design of Speech based Interaction Control System for Medical Service Robot[J],Chinese High Technology Letters, 2014,(7):745-751. (In Chinese with English abstract).

Conference papers

- M. Penčić , M. Čavić , M. Rackov , B. Borovac , Z. Lu ,Optimization of Planetary Gear Trains with Spur, Helical and Double Helical Gears. Conference: 8th International Scientific and Expert Conference – TEAM 2016, Trnava, Slovakia, 19–21 October 2016, pp. 29-34

- M. Penčić , M. Čavić , M. Rackov , B. Borovac , Z. Lu ,Development of the Lower Body of Assistive Humanoid Robot MARKO, 8th International Scientific and Expert Conference – TEAM 2016, Trnava, Slovakia, 19-21 October 2016. pp. 23-28.

- Verislav Djukić · Aleksandar Popović · Zhenli Lu, Run-time Code Generators for Model-level Debugging in Domain-specific Modeling, Conference: DSM workshop, Splash 2016, At Amsterdam, DOI: 10.1145/3023147.3023148.

- José Rosado,Francisca Tercia da Silva,Vitor M F Santos,Zhenli Lu. Modulation of Dynamic Movement Primitives for Biped Locomotion[M]// ASSISTIVE ROBOTICS:Proceedings of the 18th International Conference on CLAWAR 2015. 2015:389-396.
- Zhenli Lu, Yafei Xie, Chao Liu, Huigang Xu , Jun Liu, Limin Mao, Changkao Shan and Bin Li. Design of a MNSM-based Controller for Swimming Locomotion of a Snake-like robot. pp.2050-2055, The 5th Annual IEEE International conference on Cyber Technology in Automation, Control and Intelligent Systems (Cyber-2015), June 8-12,2015,Shenyang,China.

- Zhenli Lu, Kai Tian, Huigang Xu , Jun Liu, Limin Mao, Shujun Liu, Changkao Shan and Bin Li , Design of Kinect-based Human Robot Interaction Systems for a RoboCup Middle Size League Soccer Robot,pp 1689-1874, The 5th Annual IEEE International conference on Cyber Technology in Automation, Control and Intelligent Systems (Cyber-2015), June 8-12,2015,Shenyang,China.

- Liu, S., Wang, W., Pu, Y., Zhuang, M., Chang, J.,Lu Z.and Li B., Threshold file-based adaptive calibration of field information for the middle size league soccer robot,pp 1103-1108, The 5th Annual IEEE International conference on Cyber Technology in

Automation, Control and Intelligent Systems (Cyber-2015), June 8-12,2015,Shenyang, China.

- Yong Chen,Zhaoding Qiu,Zhenli Lu,Limin Mao.Numerical simulation of hydrodynamic characteristics of underwater snake-like robot, [C]// International Conference on Control, Automation and Information Sciences. IEEE, 2015:491-495.

- Luo, Y., Liu, J., Yang, G., & Lu, Z. (2014). Smartphone-Controlled Robot Snake for Urban Search and Rescue. Intelligent Robotics and Applications, 《Lecture Notes in Computer Science》, 2014, 8917:352-363.

- Zhenli Lu, Design of a 3DOF Passive Rotating Platform for the Adaptive Motion Planning of a Single-Legged Robot.13th International Conference on Autonomous Robot Systems and Competitions (ROBOTICA 2013), April 24-25,2013,pp 112-117, Lisbon, Portugal,2013.

- Liwei Zhang, Sebastian Rockel, Federico Pecora, Lothar Hotz, Zhenli Lu, Denis Klimentjew, Jianwei Zhang, Evaluation Metrics for an Experience-based Mobile Artificial Cognitive System , 2013 IEEE International Conference On Intelligent Robots and Systems (IROS2013): Workshop on Metrics of Embodied Learning Processes in Robots and Animals, 2013.11.

- Liwei Zhang, Jianhua Zhang, Bo Chen, Zhenli Lu, Ying Hu, Jianwei Zhang. Multiview Triangulation with Uncertain Data, 2013 IEEE International Conference on Robotics and Biomimetics (ROBIO 2013), Dec.11-14, pp 1414-1419, Shenzhen, China, 2013.

- José Rosado, Filipe Silva, Vítor Santos and Zhenli Lu. Reproduction of Human Arm Movements Using Kinect-Based Motion Capture Data,2013 IEEE International Conference on Robotics and Biomimetics (ROBIO 2013), Dec.11-14, pp 885-890, Shenzhen, China, 2013.

- Zhenli Lu,Filipe Silva, Liwei Zhang and Huigang Xu. MNSM-Inspired Method for the Motion Control of Dual-Arm Robot. 2013 IEEE International Conference on Robotics and Biomimetics (ROBIO 2013), Dec.11-14, pp 1341-1346, Shenzhen, China, 2013.

- Zhenli Lu, Aneesh Chauhan, Filipe Silva, Luis Seabra Lopes, A Brief Survey of Commercial Robotic Arms for Research on Manipulation, 2012 IEEE Symposium on

Robotics and Applications (ISRA 2012), June 3-6 2012, pp 986-991 , Kuala Lumpur, Malaysia,2012.

- Zhenli Lu, Stephane Lallee, Vadim Tikhanoff, Peter Ford Dominey. Bent Leg Walking Gait Design for Humanoid Robotic Child-iCub Based on Key State Switching Control. 2012 IEEE Symposium on Robotics and Applications (ISRA 2012), June 3-6 2012, pp 992-998 , Kuala Lumpur, Malaysia,2012.

- Zhenli Lu, Filipe Silva, Luis Seabra Lopes.A COP-based Controller Developed in YARP for Adaptive Motion Planning of a Single Leg robot. 2012 IEEE International Conference on Robotics and Biomimetics (ROBIO 2012), Dec 11-14. 2012, pp 42-47,Guangzhou, China, 2012.

Technical solutions

- Technical solution for Production Line with One Chinese Brand industry robot adopted by the Robot Intelligent Control Lab of School of Electrical Engineering and Automation, Changshu Institute of Technology,2015. (In Chinese)

- Technical solution for two Production Lines with 10 ABB Industry robots adopted by the joint lab of ABB robot company and Changshu Institute of Technology,2016. (In Chinese)

- Training program for robotics Engineering of School of Electrical Engineering and Automation, Changshu Institute of Technology,2016,2017. (In Chinese)

- Joint Training program for robotics Engineering of School of Electrical Engineering and Automation, Changshu Institute of Technology and American University, 2017. (In English)

Patents

- "An Robot for Campus Inspection",Limin Mao,Benlian Xu,Zhenli Lu,Mingli Lu,Chenx Wang, Yusheng Wu, CN204414116U[P]. 2015. (In Chinese)

- "A snake-robot for Rescu task",Limin Mao, Jingjing Cao,Benlian Xu, Zhenli Lu, CN204221787U[P]. 2015. (In Chinese)

- "An idiodynamics robot", Limin Mao,Jingjing Cao,Benlian Xu,Zhenli Lu,Peiyi Zhu, CN204414116U[P]. 2015. (In Chinese)

- "An Alarm System for Intelligent Electrial Car",Limin Mao,Zhenli LumPingya Tan,Shujun Liu,Peiyi Zhu,Chenxi Wang.CN204270517 U[P]. 2015. (In Chinese)

- "A Water Quality Detection Boat",Limin Mao,Zhenli Lu,Shujun Liu,etc, CN 204154337 U[P]. 2015.

- "A platform with real-time sensing of its three dimensional passive rotation", Zhenli Lu, Paulo Dias, Filipe Silva, Aneesh Chauhan, and Luís Seabra Lopes, PN 106.205.06.11, 2014.

- "Rehabilitative robot", Limin Mao, Shujun Liu, Chao Shen, Chang An, Peiyi Zhu, Zhenli Lu, Yaping Tan, CN 201620321975.9 U[P]. 2016. (In Chinese)

- "Snake like robot with unidirectional passive wheel contact mechanism and its control method",Zhenli Lu,Chao Liu,Kaixiang Sun,Yafei Xie, Dayu Feng,Limin Mao,Changkao Shan, ZL 2015 1 0301259.4[P]. 2017. (In Chinese)

- "Water wave and water flow generating system for the motion performance of a snake like robot in water",Zhenli Lu,Dayu Feng,Yafei Xie,Changkao Shan, Xianzhen Xu, ZL 2015 1 0900270.2 [P]. 2017. (In Chinese)