

Daqing Yi

CONTACT INFORMATION	557 Wymount Terrace, Provo, UT 84604 http://dqyi11.github.io/	801-362-9158 daqing.yi@byu.edu
EDUCATION	Brigham Young University , Provo, UT, USA Ph.D., Computer Science, <i>Expected</i> : Summer 2016 <ul style="list-style-type: none">• Thesis Topic: <i>Robotic Understanding of Human Information: Supporting the Path Planning in Human-Robot Collaboration</i>• Advisors: Michael A. Goodrich, Ph.D Tongji University , Shanghai, China M.S., Control theory and control engineering, March 2008 <ul style="list-style-type: none">• Topic: <i>Toward Biologically Inspired Visual Perception and Control.</i>• Advisor: Ping Jiang, Ph.D B.S., Automation, June 2005	
RESEARCH EXPERIENCE	Research Assistant Human Centered Machine Intelligence Lab, Computer Science Department, Brigham Young University <i>Research topics</i> : Path planning, Multi-objective optimization, Evolutionary computation, Bayesian learning and inference, Robotics, Human-robot interaction Visiting Graduate Student Robotics and Artificial Intelligence Lab, University of Rochester <i>Research topics</i> : Robotics, Machine learning Research Assistant Robot and Intelligent System Lab, Department of Control Science and Engineering, Tongji University <i>Research topics</i> : Iterative learning control, Neural network, Optimal control, Wireless sensor network	September 2012 to present July 2015 to August 2015 September 2005 to March 2008
TEACHING EXPERIENCE	Instructor CS 470 - Introduction to Artificial Intelligence Computer Science Department, Brigham Young University	Springs 2015
WORK EXPERIENCE	Software Engineer QAD Inc., Shanghai, China <i>Area of work</i> : Developing supply chain component in ERP system Software Engineer Zii Labs, Creative Technology Ltd., Shanghai, China <i>Area of work</i> : Developing SDK for “stemcell computing” platform	May 2010 to July 2012 April 2008 to May 2010
PUBLICATIONS	Article In Preparation 1. D. Yi , K. Seppi and M. Goodrich, “Understanding the Particle Swarm Optimization by component decomposition”. <i>In preparation for submission to IEEE Transaction on Evolutionary Computation.</i>	

2. **D. Yi**, T. Howard, M. Goodrich and K. Seppi, "Toward Instructing Robotic Navigation by Expressing a Homotopic Requirement". *In preparation for submission to IJCAI 2016*.
3. **D. Yi**, T. Howard, J. Arkin, M. Goodrich and K. Seppi, "Understanding adverbs in natural language instructions : a cost-function learning approach". *In preparation for submission to IROS 2016*.

Articles In Submission

1. **D. Yi**, M. Goodrich, T. Howard and K. Seppi, "Topology-Aware RRT* for Parallel Optimal Sampling in Topologies." *RSS 2016*.

Peer Reviewed Journal Articles and Conference Proceedings Articles

1. **D. Yi**, M. Goodrich and K. Seppi, "Homotopy-Aware RRT* : Toward Human-Robot Topological Path-Planning." *HRI 2016*.
2. **D. Yi**, M. Goodrich and K. Seppi, "MORRF* : Sampling-Based Multi-Objective Motion Planning." *Proceedings of the 24th International Joint Conference on Artificial Intelligence (IJCAI), 2015*.
3. **D. Yi**, K. Seppi and M. Goodrich, "Input-to-state stable analysis on Particle Swarm Optimization." *Proceedings of the 2015 on Genetic and Evolutionary Computation Conference (GECCO), 2015*.
4. **D. Yi**, M. Goodrich and K. Seppi, "Informative Path Planning with a Human Path Constraint." *2013 IEEE International Conference on Systems, Man, and Cybernetics (SMC)*, October 2014.
5. **D. Yi** and M. Goodrich, "Supporting task-oriented collaboration in human-robot teams using semantic-based path planning." *Proc. SPIE 9084, Unmanned Systems Technology XVI, 90840D*, June 2014.
6. M. Goodrich and **D. Yi**, "Toward Task-Based Mental Models of Human-Robot Teaming: A Bayesian Approach." *Virtual Augmented and Mixed Reality. Designing and Developing Augmented and Virtual Environments*. Springer Berlin Heidelberg, 267-276, July 2013.
7. **D. Yi**, P. Jiang, E. Mallen, X. Wang, and J. Zhu, "Enhancement of image luminance resolution by imposing random jitter." *Neural Computing & Applications*, vol. 20, no. 2, pp. 261-272, 2011.
8. **D. Yi**, P. Jiang and J. Zhu, "A Simple Neural Network for Enhancement of Image Acuity by Fixational Instability." *Advances in Neural Networks-ISNN 2009, Lecture Notes in Computer Science*, Springer, pp. 289-298, 2009.
9. **D. Yi**, J. Wu and P. Jiang, "Iterative Learning Control for Visual Servoing with Unknown Homography Matrix." *IEEE International Conference on Control and Automation, 2007. ICCA 2007*. pp.2791-2796, May 30 2007-June 1 2007.

REFERENCES

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SKILLS

- C, C++, C#, Java
- Python, MATLAB, HTML, L^AT_EX, make, cmake
- Progress 4GL, SQL, UNIX shell scripting
- ROS, OpenCV, Qt, Gazebo