Daqing Yi

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EDUCATION

Brigham Young University, Provo, UT, USA

Ph.D., Computer Science, Expected: Summer 2016

• Advisors: Michael A. Goodrich, Ph.D

Tongji University, Shanghai, China

M.S., Control theory and control engineering, March 2008

• Topic: Research on Biologically Inspired Visual Perception and Control.

• Advisor: Ping Jiang, Ph.D

B.S., Automation, June 2005

RESEARCH EXPERIENCE

Research Assistant

September 2012 to present

Human Centered Machine Intelligence Lab,

Department of Computer Science,

Brigham Young University

Research topics: Path planning, Multi-objective optimization, Evolutionary computation, Bayesian learning and inference, Robotics, Human-robot interaction

Research Assistant

September 2005 to March 2008

Robot and Intelligent System Lab,

Department of Control Science and Engineering,

Tongji University

Research topics: Iterative learning control, Neural network, Optimal control, Wireless sensor network

Work Experience

Software Engineer

May 2010 to July 2012

QAD Inc., Shanghai, China

Area of work: Developing supply chain component in ERP system

Software Engineer

April 2008 to May 2010

Zii Labs, Creative Technology Ltd., Shanghai, China

Area of work: Developing SDK for "stemcell computing" platform

PUBLICATIONS

Article In Preparation

- 1. **Yi, D.**, Seppi, K. and Goodrich, M., "Understanding the Particle Swarm Optimization by component decomposition". *In preparation for submission to IEEE Transaction on Evolutionary Computation*.
- 2. **Yi, D.**, Goodrich, M and Seppi, K., "Homotopy-Aware RRT*: Toward Human-Robot Topological Path-Planning.".

Peer Reviewed Journal Articles and Conference Proceedings Articles

- 1. **Yi, D.**, Goodrich, M. and Seppi, K., "MORRF*: Sampling-Based Multi-Objective Motion Planning." *2015 IJCAI* (Accepted).
- 2. **Yi, D.**, Seppi, K. and Goodrich, M., "Input-to-state stable analysis on Particle Swarm Optimization." 2015 GECCO (Accepted).
- 3. Yi, D., Goodrich, M. and Seppi, K., "Informative Path Planning with a Human Path Constraint." 2013 IEEE International Conference on Systems, Man, and Cybernetics (SMC), October 2014.

- 4. **Yi, D.** and Goodrich, M., "Supporting task-oriented collaboration in human-robot teams using semantic-based path planning." *Proc. SPIE 9084, Unmanned Systems Technology XVI, 90840D*, June 2014.
- Goodrich, M. and Yi, D., "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.
- 6. Yi, D., Jiang, P., Mallen, E., Wang, X., Zhu, J., "Enhancement of image luminance resolution by imposing random jitter." *Neural Computing & Applications*, vol. 20, no. 2, pp. 261-272, 2011.
- Yi, D., Jiang, P., Mallen, E., Wang, X., Zhu, J., "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.
- 8. Yi, D., Wu, J. and Jiang, P., "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.