

LENING LI

39 William St, Apt 203 ◊ Worcester , MA. 01609

(+1) 774 823 2639 ◊ lli4@wpi.edu

EDUCATION

Worcester Polytechnic Institute

Robotics Engineering

Advisor: Jie Fu

Overall GPA: 3.76/4.0

President of Graduate Student Government (GSG)

September 2016 - Present

Doctorate Candidate

January 2019 - Present

Higher Education Consortium of Central Massachusetts

Certificate in College Teaching

July 2018 - August 2019

Worcester Polytechnic Institute

Computer Science

Thesis: BiRRTOpt: A COMBINED SOFTWARE FRAMEWORK FOR MOTION PLANNING APPLIED ON ATLAS ROBOT

Advisor: Michael, Gennert

Overall GPA: 3.64/4.0

September 2014 - May 2016

Master of Science

Harvard Summer School

Computer Science

Overall GPA: 4.0/4.0

June 2015 - August 2015

Harbin Institute of Technology

Information Security (Computer Science)

Thesis: Contourlet Transform Based Image Compression

Advisor: Miao, Zhang

English Language and Literature

Thesis: A Study on the Male Chauvinism in "Women in Love"

Advisor: Yuping, Jia

Overall GPA: 85/100 (Top 10%)

September 2010 - July 2014

Bachelor of Science

Bachelor of Arts

TECHNICAL STRENGTHS

Computer Languages

C/C++, MATLAB, Python, Java, HTML, JavaScript, SQL, Assembly Language, BASIC, XML, ASP, Verilog, CSS

Software & Tools

ROS, LaTeX, MFC, PowerBuilder, Qt Creator, IxChariot, Git, Vim

RESEARCH EXPERIENCE

Control and Intelligent Robotics Lab (CIRL)

Research Assistant

Worcester Polytechnic Institute

June 2019 - Present

- Working on the *Serial Interactions in Imperfect Information Games Applied to Complex Military Decision Making (SI3-CMD)*.

Control and Intelligent Robotics Lab (CIRL)

Research Assistant

Worcester Polytechnic Institute

June 2016 - August 2017

- Worked on the *reinforcement learning under temporal logic constraints*.

TEACHING EXPERIENCE

Worcester Polytechnic Institute*Teaching Assistant*

Worcester, MA

August 2018 - December 2018

- Collaborated with another teaching assistant and two graders to help improving the teaching quality of the course called *Computer Vision*.

Worcester Polytechnic Institute*Teaching Assistant*

Worcester, MA

August 2017 - May 2018

- Led a team of 5 to help and collaborate with students for improving the teaching quality of the course called *Introduction to Robotics*.

INDUSTRY EXPERIENCE

Rudolph Technologies*Software Engineering Contractor*

Tewksbury, MA

August 2015 - January 2016

- Developed the software to process data collected from the wafers to help customers including Samsung, Intel, and et al. improve the production of wafers.

Rudolph Technologies*Software Engineering Intern*

Tewksbury, MA

July 2015 - August 2015

- Programmed and Assisted in migrating code and history from several version control systems on various operating systems to Perforce.

Neusoft*Software Engineering Intern*

Dalian, China

July 2013 - August 2013

- Developed map management system for storing, inserting, deleting, sorting, and search maps.

Philips(China)*Software Engineering Intern*

Shanghai, China

July 2012 - August 2012

- Assisted in fixing bugs and improving the performance of mature software product.

AWARDS

Harbin Institute of Technology*Summa Cum Laude*

Harbin, China

July 2014

- Graduated with University Highest Honor.

PUBLICATIONS

Conference

Li, L., & Fu, J. (2019). Topological Approximate Dynamic Programming under Temporal Logic Constraints. Submitted to 58th IEEE Conference on Decision and Control (CDC 2019). IEEE.

L. Li and J. Fu, "Approximate dynamic programming with probabilistic temporal logic constraints," *arXiv preprint arXiv:1810.02199*, 2018

L. Li and J. Fu, "Sampling-based approximate optimal temporal logic planning," in *Robotics and Automation (ICRA), 2017 IEEE International Conference on*, pp. 1328–1335, IEEE, 2017

L. Li, X. Long, and M. A. Gennert, “Birrtopt: A combined sampling and optimizing motion planner for humanoid robots,” in *Humanoid Robots (Humanoids), 2016 IEEE-RAS 16th International Conference on*, pp. 469–476, IEEE, 2016

C. G. Atkeson, B. P. W. Babu, N. Banerjee, D. Berenson, C. P. Bove, X. Cui, M. DeDonato, R. Du, S. Feng, P. Franklin, *et al.*, “No falls, no resets: Reliable humanoid behavior in the darpa robotics challenge,” in *Humanoid Robots (Humanoids), 2015 IEEE-RAS 15th International Conference on*, pp. 623–630, IEEE, 2015

Journal

Z. Chen, L. Li, and X. Huang, “Building an autonomous lane keeping simulator using real-world data and end-to-end learning,” *IEEE Intelligent Transportation Systems Magazine*, pp. 1–1, 2018

M. DeDonato, F. Polido, K. Knoedler, B. P. Babu, N. Banerjee, C. P. Bove, X. Cui, R. Du, P. Franklin, J. P. Graff, *et al.*, “Team wpi-cmu: Achieving reliable humanoid behavior in the darpa robotics challenge,” *Journal of Field Robotics*, vol. 34, no. 2, pp. 381–399, 2017

C. G. Atkeson, B. Babu, N. Banerjee, D. Berenson, C. Bove, X. Cui, M. DeDonato, R. Du, S. Feng, P. Franklin, *et al.*, “What happened at the darpa robotics challenge, and why,” *submitted to the DRC Finals Special Issue of the Journal of Field Robotics*, vol. 1, 2016

Book

C. G. Atkeson, P. B. Benzun, N. Banerjee, D. Berenson, C. P. Bove, X. Cui, M. DeDonato, R. Du, S. Feng, P. Franklin, *et al.*, “Achieving reliable humanoid robot operations in the darpa robotics challenge: Team wpi-cmus approach,” in *The DARPA Robotics Challenge Finals: Humanoid Robots To The Rescue*, pp. 271–307, Springer, 2018

C. G. Atkeson, P. B. Benzun, N. Banerjee, D. Berenson, C. P. Bove, X. Cui, M. DeDonato, R. Du, S. Feng, P. Franklin, *et al.*, “What happened at the darpa robotics challenge finals,” in *The DARPA Robotics Challenge Finals: Humanoid Robots To The Rescue*, pp. 667–684, Springer, 2018

Thesis

L. Li, “Birrtopt: A combined software framework for motion planning applied on atlas robot,” Master’s thesis, WORCESTER POLYTECHNIC INSTITUTE, 2016

EXTRACURRICULAR

Lhasa Welfare Center for Children
Volunteer Teacher

Tibet, China
August 2013 - September 2013

- Raised funds for children who cannot afford schools.
- Volunteered to teach children.