121 Campus Dr, APT 1202A Stanford, CA 94305 yljin@stanford.edu 650.391.3859

#### **EDUCATION STANFORD UNIVERSITY**

Stanford, CA

Master of Science in Computer Science

Sept 2010 - Mar 2012

Coursework highlight: Artificial Intelligence, Machine Learning, Social Network Analysis

• GPA 4.0/4.0

## SHANGHAI JIAO TONG UNIVERSITY

Shanghai, China

Master of Science in Microelectronics and Solid State Electronics

Sept 2007 - Feb 2010

• GPA 3.87/4.0 (ranked 1st out of 47)

Bachelor of Science in Electrical Engineering

Sept 2003 - Jul 2007

#### **EXPERIENCE**

## Wison (Shanghai) Telecommunication Technology CO., Ltd.

Shanghai, China

Software Engineer in Social Network Analysis group

Feb 2010 - Aug 2010

- Designed AWK Shell scripts for analyzing and extracting key information in the Call-Record Database of mobile telecommunication services of China Unicom.
- Developed C++ algorithms on circle and connection analysis on individual users to perform user profiling, customer ranking, and churn prediction.
- Implemented Modularity Maximization algorithm and Clique Percolation Method in C++ to identify social communities in a telecom network.
- Applied viral marketing in separate communities via social-influencer detection algorithms.

# Microrobotics Lab, Shanghai Jiao Tong University

Shanghai, China

Reconfigurable Modular Climbing Multi-Microrobot System

Nov 2008 - Feb 2010

- Integrated the control system on a 28mm diameter PCB to reduce the complexity of system.
- Developed a zigzag control method for wall-climbing according to the dynamics of a robot.
- Designed algorithms of pillar-climbing and ditch-crossing.

Microrobot Dynamic Optimization

Feb 2007 – Oct 2008

- Constructed a dynamic model with slip for the robot and route simulations.
- Developed a vision feedback-based control method to improve positioning performance.
- Designed a new magnetic wheel structure to optimize dynamic performance.
- Applied reinforcement learning algorithms on robot route-planning to reduce deviation.

## SELECTED PUBLICATIONS

- Y. Jin, J. Chen, Z. Li, "A Magnetic Wheel Structure for an Omnidirectional Microrobot to Limit Slip Effect", *International Journal of Advanced Robotics Systems*, Vol.6, pp.277-284, 2009.
- Y. Jin, J. Chen, Z. Li, "Dynamic Modeling, Control and Simulation with Slip for an Omnidirectional Mobile Microrobot", *Lecture Notes in Artificial Intelligence ICIRA* 2008, Vol. 5314, Part I, pp. 911-920, 2008.

# **HONORS**

Excellent Academic Scholarship	Shanghai Jiao Tong University	2005-2009
Kwang-Hua Scholarship (first class)	Shanghai Jiao Tong University	2007-2008
Best Undergraduate Thesis	Shanghai Jiao Tong University	2007

#### **COMPUTER SKILLS**

- Programming: C/C++, VB, JAVA, PYTHON, PERL, AWK, MATLAB, SQL
- Operation System: Windows, Linux