YICHEN YANG

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EDUCATION

M.S., Department of Electrical Engineering, Columbia University
• GPA: 3.67/4.0   Aug. 2012-Dec. 2013(Expected)
B.S., Department of Automation, Shanghai Jiao Tong University
• GPA: 87.26/100 • Rank: 3/105   Sept. 2008-Jul. 2012
Exchange Program, School of Engineering and Applied Science, University of Virginia
• GPA: 3.5/4.0   Aug. 2011-Dec.2011
Summer Program, Georgia Institute of Technology
• GPA: 4.0/4.0   Summer 2011

RESEARCH EXPERIENCE

Fatigue Detection Based on Video Analysis (C++, OpenCV & TI DSPs)
• Lab: Image Processing and Pattern Recognition Lab of SJTU   Dec.2011-Jun.2012
• Content: Designed an accurate system to monitor the tester's fatigue by applying several computer version methods including pattern recognition, particle filter and image binary Processing; implemented the fatigue detection system on the DSP(TMS320DM6437)
Perception Learning Model Corresponding to Free-energy Principle(Matlab)
• Adviser: Prof. Peter A. Beling, UVa   Sept.2011-Dec.2011
• Content: Modeled and simulated the agent network evolution process based on free-energy principle; designed a free-energy formula that hence each agent follows a global asymptotic stability adaptive process
• Achievement: Paper "Perception Learning Model Corresponding to Free-energy Principle for Agents Network"

INTERNSHIP

Software Engineering Intern (Scala)
• Company: Onswipe   May. 2013-Jul.2013
• Created features for a highly flexible web crawler including upload data to aws DynamoDB, writing and testing Thrift service, implementing and testing Bolts in the Storm topology, and adding Puppet classes in order to automate deployment of the system
Research Assistant
• Lab: SJTU-Rockwell Automation Laboratory   Jan 2011-Mar. 2011
• Implemented examples on RSView Supervisory Edition Software and maintained equipment

PROJECT DESIGN

• Client-Server Game System Based on UDP Protocol(JAVA)   Jan.2013-Feb.2013
•Company Network Analysis and Visualization(Matlab)   Nov.2012-Dec.2012
• Real-time Large-vocabulary Continuous Speech Recognition(C++)   Sept.2012-Dec.2012
• Optimization in Telecommunication Network with Radio Repeaters(C++)   Jan 2011-Feb 2011

AWARDS

• Outstanding Graduates in Shanghai Jiao Tong University   2012
• "Meritorious Winner " Prize in USA Mathematical Contest in Modeling   2011
• First-Class Prize in China Mathematical Contest in Modeling   2010
• Academic Excellent Student's Scholarship (three times)   2009-2011

ACTIVITIES

• President of Student League Member Union   2008-2010
• Volunteer of 2010 World Expo at Shanghai   2010

SKILL

• Software: Java, C++, Scala, HTML, CSS, SQL, MATLAB, OpenCV, CCStudio
• Hardware: Embest IDE, TI DSPs, Cisco Router