Jinlai Xu

Curriculum Vitae

Contact Information

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Education

2012–Present **M.E in Software Engineering (expected)**, *China University of Geosciences (211).*
GPA – 89.9/100, Major GPA – 91.9/100

2008–2012 **B.E. in Software Engineering**, *China University of Geosciences (211).*
GPA – 88.6/100, Major GPA – 92.9/100, ranked 1st/96.

INTERESTS

Research	Cloud Computing, Machine Learning, Computer Vision, Robotics.
Sports	Basketball, Billiards

Research Experience

2012–Present **Research Assistant**, ROBOTICS AND ARTIFICIAL INTELLIGENCE LABORATORY, China University of Geosciences, Wuhan.
- Reviewed related literatures (mainly in Cloud Computing)
- Constructed the cloud computing platform for our faculty:
    - Designed the virtualization solution for the cluster. (based on Xen)
    - Deployed Hadoop and related application(Hive, Spark, Solr ...) on the cluster.
    - Supported the experiment of Deep Learning in our lab.
- Studied MapReduce programming model and did research on it:
    - Read the source code of MapReduce in Hadoop project.
    - Proposed a new method to reuse the intermediate results automatically and data-awarenessly and implemented the prototype system by modifying the core code of MapReduce.
    - Evaluated the performance on the cluster and got the result that the system could improve the performance up to 24.6% compared with the previous optimization work.
    - the paper is contributed to ICC 2015 and under review. (Title: **Performance Acceleration for MapReduce Computing via Intermediate Result Reusing**)
- Managed the cluster in our faculty:
    - Allocated the virtual machines and network resource.
    - Supported a mirror site on the cluster (http://mirrors.cug.edu.cn).

2009–2012 **Undergraduate Research Assistant**, Robotics and Artificial Intelligence Laboratory, China University of Geosciences, Wuhan.
- Reviewed related literatures (mainly in Computer Vision and Robotics).
- Participated in The 9th Robot Soccer Tournament of China and The Tryouts for FIRA in Changchun in freshmen year.
- Studied the architecture and implementation of ROS(The Robot Operating System) and preliminarily deployed it on the robots control panel (Version: RB100 by RoBoard).
- Successfully applied for The National College Students Innovation Experiment Program:
  - **Topic: Small Model Aircraft Autopilot System and Aerial Photo Research**
  - Chose Quadrotor(an aircraft with four rotors) as the carrier platform of the research.
  - Studied the theory of balancing the Quadrotor with MikroKopter(one of the most famous open source UAV projects).
  - Studied and implemented the point clouds registration algorithm ICP and RANSAC on ROS.
  - Used ASUS Xtion PRO (a device like Kinect) to get the point cloud data and evaluated the algorithm.
  - Wrote graduation thesis based on this topic.(Title: the Design and Implementation of the Quadrotor Autopilot and 3-D Point Cloud Generation and Processing System)

Work Experience

2013–2014 **Teaching Assistant**, *China University of Geosciences*, Wuhan.
- Advanced Programming Language (JAVA)
- Instructor: Prof. Shengwen Li

Honors & Awards

2013–2014 **Outstanding Student Award**, China University of Geosciences, China

2010–2011 **Fellows Scholarship**, China University of Geosciences, China

2009–2010 **National Scholarship**, Ministry of Education, China

2009 **The Second Place of AndroSot(Full-autonomous 3vs3 Humanoid Robot Soccer)**, The 9th Robot Soccer Tournament of China and The Tryouts for FIRA, Changchun, China

2009 **The First Prize of AndroSot(Semi-autonomous 3vs3 Humanoid Robot Soccer)**, The 9th Robot Soccer Tournament of China and The Tryouts for FIRA, Changchun, China

Languages

Chinese **Native proficiency**

English **Professional working proficiency** *Conversationally fluent*

Skills

Basic JAVA, C++

Intermediate PYTHON, LATEX, Linux ,Emacs, GitHub, Hadoop

Advanced Cloud Computing Infrastructure, Virtualization, Computer Vision

Projects

Oct.2013–Jan.2014 **Leader**, THE CRM SYSTEM CUSTOMIZATION FOR A.X.W COMPANY, A.X.W tech, Wuhan.
- Based on Vtiger open source CRM system.
- Customized the customer information module to satisfy the requirement of A.X.W company.
- Combined the customer information module with the staff information module for the company's requirement.
- Designed and implemented the data transfer program from the old system(based on office software) to the new system(based on web)

Jan.2012–Oct.2013 **Programmer**, GEOLOGICAL EXPLORATION PROJECTS IN HENAN PROVINCE, Land and Resources in Henan province Scientific Research Institute, Zhengzhou.
- Participated in the Web Service Programming and Web site construction.

Jun.2012–Dec.2012 **Leader**, THE HUMANOID ROBOT SIMULATION AND ASSEMBLY VIDEOS, Robotics and Artificial Intelligence Laboratory, Wuhan.
- The project based on OGRE to realize the robot motion simulation is mainly used in action debug of the robots. We made the model of the humanoid robot by using the modeling tool SolidWorks. And for teaching requirement, the assembly video is also made in the SolidWorks.

Oct.2010–Jun.2012 **Leader**, NATIONAL COLLEGE STUDENTS INNOVATION EXPERIMENT PROGRAM, **Topic: Small Model Aircraft Autopilot System and Aerial Photo Research**, Wuhan.
- see Page.2