# **Di Xiao** – Coding to create a new world!

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# **Education**

#### **Vanderbilt University**

Degree on May 2014

- Master of Science in Computer Science GPA 3.43/4.0
- Main Courses: Software Engineering. Big Data. Algorithms. Programming on Android. Mobile Robotics. Advanced Al. Computer Graphics.

## Xi'an Jiaotong University

Degree on July 2011

- Bachelor of Engineer in Automation GPA 84/100
- Main Courses: Computer Aided and Process Control, Signal Processing, Microcontroller, LabView Labs.

# **Intern and Working Experience**

## Institute for Software Integrated Systems (Intern, TN U.S.A)

Sep 2013 - May 2014

- Research projects of building model for Mars Rover and RC car using Modelica Modeling Language and simulating in the GME.
- Learnt a lot how to work as a team since communication was difficult when we worked at different time shift.

#### Quality Manufacturing System, Inc. (Intern, TN U.S.A)

May 2013 - Aug 2013

- Wrote software to retrieve data from web server and created inventory reports for Pharmacy Shop.
- Learnt new language for Label Printer and create drug labels using data in MS-SQL server.
- Wrote scripts to migrate old projects into new IDE version and fixed bugs after migration.

# **ICBC Bank Software Center (Programmer, China)**

July 2011 - Dec 2011

- Wrote code for user management in Bond Trade System under company framework.
- Wrote stored procedures in PL/SQL to load data for some trading logic.
- Optimized the system to support large amount of users and huge data flow.

# **Professional Skills**

#### **Big Data**

- Apache Hadoop, Hbase, Pig. Amazon Web Services.
- Automated Data retrieve, transform and loading using Sqoop and Python script.
- Map Reduce Algorithm Design. DB: Mango DB. MySQL.

## Object oriented programming and Software Engineering

- Language: Java(proficient), C++(proficient), Python(Beginner)
- Design Patterns. Code Refactoring. Unit Test and Integration Test.
- Tools: Git version control. Eclipse IDE, OS: Linux and Window.

#### **Android Programming**

Android SDK. Android test framework. Profiling. Multi-Thread, Network and Web Services.

#### **Web Development Skills**

HTML, CSS, JavaScript, JSON, XML, SQL, Django web framework.

# **Projects**

#### **Android App CrimeSpot (Group)**

- Google App Engine based server to crawl data from web, send safety information to clients and store clients' comments.
- Android client for users to view, search crime information requested from server based on GPS data and report crime.
- Warning nearby crime notification system using Pubnub.

# Mars Rover Modeling (Group)

- Research projects of building model for Mars Rover and RC car from locomotion, thermal status, electrical control and power supply aspects using Modelica Modeling Language
- Simulate model in the Cyphy model simulation environment called GME.
- I am responsible for modeling locomotion parts and controls and writing parser in Python for XML component file and generating a component library.

#### Social Network Database Design (Individual)

- Social network database schema design and implementation in RDBMS (MySQL) and NoSQL (Hbase) respectively.
- Use Map-Reduce framework to manipulate and analyze large social network datasets on Amazon EMR.

# Ray Tracer (Individual)

- Render images containing primitive objects like triangles, sphere and boxes, lights sources and a camera (perspective and orthographic).
- The rendering process handles with reflection, ambient light, mirror-like effects using the Phong shading model.