
Education

Illinois Institute of Technology, Chicago, IL - *Master's degree, GPA: 3.80*

Computer Science

Aug 2015 - May 2017

Courseworks: Cloud Computing, Parallel and Distributed Processing, Operating System, Algorithms, Database, Data Structure, Advanced Network.

Gengdan Institute of Beijing University of Technology, Beijing China - *Bachelor's degree*

Communications Engineering

Sep 2008 - Aug 2012

Working Experience

Shenlian Tech Inc., Beijing, China - *Software Development Engineer*

Aug 2012 - Aug 2014

SmartHome Android App

- Built an Android app for “SmartHome” System, defined communication protocol between app and server. Also implemented a real time notification receiver to update controller and sensor status.

Internet-of-Things Evaluation System

- Built an Internet-of-Things evaluation system based on Zigbee protocol and implemented a Android app to virtualize results.

ICT Chinese Academy of Sciences, Beijing, China - *SDE, Intern*

May 2012 - July 2012

- Implemented a wireless communicating software on AVR[®] microcontroller.
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Languages and Technologies

Programming Languages: Java, C/C++, Python, C#, SQL.

Development Tools: Atom, Vim, PyCharm.

Platforms: AWS, Linux (POSIX), Windows, Hadoop, Spark, MPI, OpenMP.

Github: <http://github.com/konglingfan>

Projects

Probe Data Analysis for Road Slope

Feb 2017 - Apr 2017

- Matched probe points to road links from map data.
- Derived road slope for each road link.
- Evaluated the derived road slope with the surveyed road slope in the link data file.

CloudKon clone with Amazon EC2, S3, SQS, and DynamoDB

Mar 2016 - Apr 2016

- Implemented a distributed task execution framework on AWS using EC2, SQS (Simple Queue Service), and DynamoDB (NoSQL DB).
- CloudKon: http://datasys.cs.iit.edu/publications/2014_CCGrid14_CloudKon.pdf

TeraSort on Hadoop/Spark

Jan 2016 - Feb 2016

- Built a computing grid on AWS EC2 using d2.large instances and used Hadoop and Spark to sort a 1-terabyte dataset in this 17 nodes distributed system (1 master node and 16 slave nodes).

Theater selling and managing system

Nov 2015 - Dec 2015

- Built a Java web application that allows users to buy tickets and leave comments.
- Provided a system to manage scheduling and workers' information using Oracle database and JSP/JavaBeans.