# **Haitang Hu**

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# **Summary**

- Over 3 years of full time engineering experience in Software development and management, System Infrastructure and Data Manipulation.
- Solid understanding of Machine Learning algorithms and implementation.
- Domain specific knowledge and project experience in Machine Translation and Information Extraction.
- Outstanding adaptive performance, problem solving skills and ability to learn.

#### **Education**

M.S.E., Johns Hopkins University, Baltimore, MD 2014-2016(expected)
Computer Science

**B.E**, Tongji University, Shanghai Computer Science

2007-2011

#### **Experience**

# System Administrator, Johns Hopkins University, Baltimore, MD 2014-2015

- Designed, implemented, and reliably maintained IDIES database, web services and the infrastructure required to run such services, provided design advice for projects that utilize these services.
- Deployed sensor server to gather and analyze massive temperature data from different locations in server room.

# System Engineer, NS Solutions Co., Ltd., Shanghai

2011-2014

- Designed, structured, implemented and maintained web application using *J2EE* and *MySQL*.
- Conducted complete *ETL* processes into oracle based data warehouse from India, Brazil, Japan and Korea branches.
- Understood, analyzed and optimized business flows for trading companies.
- Led research on web-service to refactor existing applications.

#### Business Analyst Intern, Hewlett-Packard Co., Ltd, Shanghai

2011

- Created reporting tools to raise productivity about 10%.
- Generated reports from SAP&BW systems and analyzed exception data.
- Consolidated more than 350 kinds of reports from India, U.S. and Thai to China reporting center.

#### Software Engineer Intern, AltiGen Communications Inc., Shanghai 2010

- Fixed bugs and enhanced functionalities for client application using *C*#.
- Designed and developed integrated outlook add-on for windows client.

# Selected Projects

#### Smart statistics, IDIES@JHU, Baltimore, MD

2015

- Understood smart counter meaning and smartools principle, scripted wrapup python program to gather smart data through ssh.
- Constructed web page to inform data, and varies *SQL* query to analyzing diversity, predicting failures, etc.

#### RNN Encoder, Johns Hopkins University, Baltimore, MD

2015

- Combined *LSTM*, *word embedding* and *recurrent neural network* to encode and decode language pairs with *Theano*.
- Rescored extracted phrase table to produce a better translation model score.

### Fenonic Acoustic Models, Johns Hopkins University, Baltimore, MD 2015

- Implemented composite *Hidden Markov Model* to identify acoustic base forms.
- Employed contrastive mechanism to gain better generative model.

#### Image Classification, Johns Hopkins University, Baltimore, MD

2014

- Developed parallel *PCA* using *blockRDD* on *Spark* and *Hadoop*.
- Classified compressed low dimensional image representation through SVM with Gaussian Kernel.

### Enterprise Get Things Done, Johns Hopkins University, Baltimore, MD 2014

- Brainstormed, discussed and selected functionality with team members.
- Designed architecture and implemented both server application and android application using *Java*, *ORMLite* and *MySQL*.

#### Shiseido Global ETL, NS Solutions Co., Ltd., Shanghai

2012

- Co-designed and constructed data warehouse and data marts.
- Implemented *ETL* scripts for various data types from different branches using *Asteria* and *PL/SQL procedures*.

# Expense Managing System, NS Solutions Co., Ltd., Shanghai 2011-2014

- Developed a web based system that managing expenses for more than 13 branches using *Java*, *Spring* and *MySQL*.
- Understood new demand, proposed best practice solution and led development.

#### Hackathon Wins 3rd Place, Kaiser Permanente and Microsoft Code-a-thon, Washington D.C. 2015

- Mainly developed a minimum viable group therapy application on iOS.
- Utilized Azure interface with iOS Application in merely one day.

Skills Programming: Java, Python, C++

Operating System: Ubuntu, RHEL, OS X, Windows

<u>Database:</u> Oracle Database (OCP), MySQL, SQL Server Machine Learning: Machine Translation, Information Extraction

Language: English, Chinese, Japanese