# Tao Lin

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# **EDUCATION**

# Columbia University, Fu Foundation School of Engineering and Applied Science

M.S. in Computer Science, Machine Learning Track

Expected Feb. 2017

# Beijing University of Posts and Telecoms, School of Information and Communication Engineering

B.Eng. in Communication Engineering, 3.72/4.00

June 2015

# WORK EXPERIENCE

Oracle

Mar. 2015 - Jul. 2015

R&D Intern @ Beijing Research and Development Center

Beijing, China

- Developed new network switching features for HCTS (Hardware Certification Test Suite) on Solaris, including Link Speed, Jumbo Frame, Port Mirroring, Link Aggregation. Wrote white-box test cases for troubleshooting.
- Automated and streamlined procedures of test environment configuration. Set up LDOM and Oracle Kernel Zone for virtualization testing.
- Independently built up an intern management system following MVC design pattern. Used Django for back-end ORM management, PostgreSQL for database, Bootstrap for front-end rendering.

**Intel Corporation** 

Aug. 2014 - Jan. 2015

Software Development Intern @ Software and Service Innovation Center

Beijing, China

- Developed W-Bench in Python and Shell a virtualization benchmarking tool for Linux server clusters by testing load capacity. Implemented modules including KVM-QEMU kernel calling, SSH authentication removing, automatic DHCP configuration and IP allocation.
- Wrote stress-verification scripts using FIO and Super-Pi. Implemented a GUI for test initialization and flow control by Node.js. Set up a Git server for code version control. Managed and maintained our datacenter.

### **PROJECTS**

### Chinese Sentic Computing

Feb. 2014 - Jun. 2014

Undergraduate Research Assistant

Tsinghua University, Beijing

- Researched on sentiment analysis algorithms at the Center for Speech and Language Technologies (CSLT). Testifed a new sentiment learning algorithm based on SVM and ELM.
- Developed a translation API using HowNet and Google Translate. Converted culturally independent knowledge from English to Chinese. Implemented a commonsense-level sentimental corpus according to SenticNet.

"Chip Bank"

Jun. 2013 - Jan. 2014

Project Leader

BUPT, Beijing

- Researched and designed an efficient recognition algorithm to optically identify the type of IC-chips based on OCR. Established an embedded repository system which intelligently stores/retrieves IC-chips.
- Coded in C/C++ on major parts of the algorithm, including image noise reduction, page segmentation, character recognition. Wrote the paper describing my algorithm.

Text Retrieval

Feb. 2013 - Apr. 2013

Project Member

BUPT, Beijing

- Wrote a web crawler to retrieve e-book information from e-libraries, featured by text filtration, automatic reconnection, real-time storage.
- Designed regular expressions, exception handling, URL format analysis.

### **PAPER**

An Improved OCR Recognition Algorithm of Electronic Components Based on Self-adaptation of Multifont Template Tao Lin, Zhuqing Jia. Accepted by *International Conference on Image Processing 2015*.

## **SKILLS**

Computer Languages Java, C\C++, Python, Shell, JavaScript, MATLAB, HTML5, PHP

Databases MySQL, PostgreSQL, SQLite, Oracle

Tools Git, Hadoop, OpenStack, Docker, AD Domain, AWS, Vim, Emacs, LATEX

Webs Servlet, Django, Node.js, Tomcat, Bootstrap, LAMP, Socket, WordPress