

Tao “Aaron” Lin

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EDUCATION

Columbia University, Fu Foundation School of Engineering and Applied Science *Expected Feb. 2017*
M.S. in Computer Science

Beijing University of Posts and Telecommunications, School of Information and Communication Engineering *June 2015*
B.Eng. in Communication Engineering, 3.72/4.00

PROJECT

Chinese Sentic Computing Feb. 2014 - Jun. 2014
Undergraduate Research Assistant Tsinghua University, Beijing

- I joined the Center for Speech and Language Technologies (CSLT) at Tsinghua University and was researching on sentiment analysis algorithms.
- Achieved the conversion of culturally independent knowledge from English to Chinese with an automatic translation API I developed using HowNet and Google Translate.
- Established a commonsense-level Chinese sentimental corpus according to SenticNet. Assisted in designing and testing a new Chinese sentiment learning algorithm based on SVM and ELM.

“Chip Bank” Jun. 2013 - Jan. 2014
Project Leader BUPT, Beijing

- Established an embedded repository system which can intelligently store/retrieve IC chips based on Atmega16 controller. Researched and designed an efficient recognition algorithm to optically identify the type of IC chips, referring to OCR.
- Coding work in C/C++ on major parts of the algorithm, including image noise reduction, page segmentation, character recognition, etc.
- Writing of the paper describing my algorithm.

Precise Text Information Retrieval Feb. 2013 - Apr. 2013
Project Member BUPT, Beijing

- Wrote a Python web crawler to retrieve book information from e-libraries on Internet, which is featured by text filtration, automatic reconnection from interruption, real-time storage.
- Design of regular expressions, exception handling, URL format analysis.
- Completed further user-behavior based analysis.

WORK EXPERIENCE

Oracle Mar. 2015 - Jul. 2015
R&D Intern @ Beijing Research and Development Center Beijing, China

- Participated in iterative development of the Hardware Certification Test Suite (HCTS) on Solaris Operating System.
- Designed and developed new features of network switching on HCTS, including Link Speed, Jumbo Frame, Port Mirroring, Link Aggregation. Wrote white-box test cases for troubleshooting of the new software functionalities.
- Automated and streamlined procedures of test environment configuration. Set up LDOM and Oracle Kernel Zone for virtualization testing.
- Took advantage of my “20% time” and independently built up an intern management system following MVC design pattern, using Django for back-end ORM control, PostgreSQL for database, Bootstrap for front-end rendering.

Intel Corporation Aug. 2014 - Jan. 2015
Software Development Intern @ Software and Service Innovation Center Beijing, China

- Python and Shell development of W-Bench – a virtualization benchmarking tool for Linux server clusters by testing load capacity. Implemented modules including KVM-QEMU Linux kernel calling, SSH authentication removing, automatic DHCP configuration and IP allocation.

- Wrote stress-verification scripts using FIO and Super-Pi. Implemented a GUI by Node.js, for test initialization and flow control. Set up a Git server for code version control.
- Management and maintenance of our datacenter.

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*. [\[paper\]](#)

Influence Index Analysis on Academic Citation in co-author Network based on Analytic Hierarchy Processing
Tao Lin, Shiyue Zhang, Wenxue Wang. Competed in *Mathematical Contest in Modeling 2014*. [\[paper\]](#)

HONORS

The first prize in College Students Innovation and Entrepreneurship Training Program

Honorable Mention in Mathematical Contest in Modeling 2014

The second-class scholarship of BUPT

SKILLS

Computer Languages	Java, C\C++, Python, Shell, JavaScript, MATLAB, HTML, PHP
Databases	MySQL, PostgreSQL, SQLite, Oracle, SQL Server
Tools	Git server, Hadoop, OpenStack, AD Domain, Vim, Emacs, L ^A T _E X