GUOHUA WU

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EDUCATION

Beijing University of Posts and Telecommunications	Computer Science and Technology	M.S.E	GPA: 87.73/100 (Rank: 4/400)	Sept. 2013 – Expected Mar. 2016
Beijing University of Posts and Telecommunications	Intelligence Science and Technology	B.E	GPA: 89.64/100 (Rank: 1/32)	Sept. 2009 – Jun. 2013

TECHNICAL SKILLS

Languages:	Python, C, C++ and Java
Research Fields:	Natural Language Processing, Dialogue Management and Machine Learning
Software:	Linux, Vim, Awk, Sed, Latex, Intellij Idea, Eclipse, Git and MySQL

INTENSHIP EXPERIENCE

Alibaba Group, Alimama Display Advertising, *Algorithm Engineer Intern*   May 2015 – Sept. 2015

- ◇ Implemented advertiser-based collaborative filtering algorithm to generate black-box crowd packages for advertisers.
- ◇ Developed a tool to evaluate offline the performance of advertising on black-box crowd packages.
- ◇ Maked frequently-used Ad performance reports generation process 30 times faster by developing a middle table.
- ◇ Developed targeting performance reports of various dimensions for targeting performance monitor.

Nuance, *Natural Language Processing Engineer Intern*   Mar. 2014 – Jul. 2014

- ◇ Developed a Natural Language Understanding (NLU) module for in-car voice assistant.
- ◇ Generated spoken utterances for 12 domains by filling dictionary into corresponding templates' slots, and extracted features from these utterances to produce training data for Maxent classifier and CRF-based slot extractor.
- ◇ Developed a Rule-based NLU for domains whose spoken utterances are relatively limited.

Baidu, Wenku, *Software Development Engineer in Test Intern*   Dec. 2012 – Apr. 2013

- ◇ Tested back-end interfaces for Wenku (wenku.baidu.com) through automating test.
- ◇ Created test cases from the functional requirements, reported bug and wrote test report.

PROJECTS

SIGHAN Chinese Word Segmentation (Team Size: 2)   **Core Developer**   May 2014 – Aug. 2014

- ◇ Presented a CRF-based Chinese segmentation system integrating supervised, unsupervised (Accessor Variety) and lexical features, and refined segmentation result with new word detection.
- ◇ Completed segmentation system development and feature extraction, and *improved 2%* performance (F1 score) by integrating unsupervised and lexical features.
- ◇ *Our system ranked first in the 3rd CIPS-SIGHAN bakeoff with precision 0.968, recall 0.978 and F1 score 0.972.*

POMDP-based Spoken Dialog System (Team Size: 1)   **Core Developer**   Sept. 2014 – Present

- ◇ Implemented a web-based spoken dialog system, and casted spoken dialog system as a Partially observable Markov decision process (POMDP). Estimated POMDP's parameters from dialog corpus and solved POMDP to generate policy. Consequently, interacted with user according to POMDP's policy instead of manual rules.
- ◇ Implemented POMDP-based dialogue management module and natural language understanding module based on Maximum Entropy and CRF. and speech synthesis.

Samsung Chinese Material Crawling (Team Size: 3)   **Core Developer**   Sept. 2013 – Dec. 2013

- ◇ Implemented a web crawler supporting main textual content extracting and duplicate paragraph removal.

Dialogue System in Given Field (Team Size: 3)   **Core Developer**   Mar. 2012 – Jul. 2012

- ◇ Provided Android LBS applications to recommend restaurants through human-machine conversation.
- ◇ Extracted restaurants' information, designed information retrieval interfaces and implemented Android application.
- ◇ *Awarded the Second Prize of the Chinese University Students Intelligence Design Contest, 2012.*

AWARDS

Vmware Enterprise Scholarship (ranked 4th out of over 400 students)	Sept. 2013 – Sept. 2014
Changfei Enterprise Scholarship (ranked 1st in major)	Sept. 2011 – Sept. 2012
National Scholarship for Encouragement (ranked 1st in major)	Sept. 2010 – Sept. 2011
National Scholarship (ranked 1st in major)	Sept. 2009 – Sept. 2010
First prize in BUPT's Innovation Award Contest	Jun. 2012
Second prize in Beijing Undergraduate Electronic Design Contest	Jun. 2012