JING CHEN

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EDUCATION

Carnegie Mellon University, Pittsburgh, PA, US

Aug 2015-Dec 2016

Master in Intelligent Information System, Language Technologies Institute, SCS

Advisor: Professor Jamie Callan

Courses: Machine Learning (PhD-level), Algorithms for NLP, Search Engines

Nanjing University, Nanjing, China

Sep 2011-Jun 2015

Bachelor in Computer Science in the *National Elite Program* (selected from over 500 undergraduates)

Rank: 1/20; GPA: 3.80/4 (90/100); Three Elite Program Scholarships; Graduated with University Honors

University of Oxford, Oxford, UK

Aug 2014-Sep 2014

Participant of the Natural Science Program at Oxford Summer Institute

Project: Solving Heat Diffusion Problem with Numerical Methods (supervised by Dr. Colin Macdonald)

RESEARCH INTERESTS

Natural Language Processing, Information Retrieval, Machine Learning

RESEARCH EXPERIENCE

Graduate Directed Study, Language Technologies Institute

Aug 2015-Present

Advisor: Professor Jamie Callan

Carnegie Mellon University, PA

Improving Entity Ranking with Knowledge Base

• Implemented Fielded Sequential Dependency Model to rank entities based on DBpedia using Indri

Undergraduate Research Assistant, Natural Language Processing Lab

Sep 2013-Jun 2015

Advisor: Associate Professor Xinyu Dai

Nanjing University, China

Question Classification with Multiple Kernel Learning (Undergraduate Thesis)

- Studied and implemented different tree kernels to integrate various syntactic features of question text
- Built multi-kernel classifiers, where various features were incorporated as basis-kernels in MKL algorithms
- Trained multi-kernel classifier on TREC datasets, where it outperformed most single-kernel classifiers

SinaMicroblog-based Chinese Social Media Mining

- Developed a fast crawler to retrieve posts in Chinese personal social network via open API
- Analyzed social data using NLP and ML algorithms and built a D3.js-based platform for visualization

WORK EXPERIENCE

Undergraduate Course *Introduction to Computer System* **Teaching Assistant**

Sep 2014-Jan 2015

Nanjing University, China

• Assisted Professor Chunfeng Yuen preparing tutorials and guided sophomore in the course project

International Education Volunteerism, Learning Enterprises China 2013 Organizer, IT Support

May 2012-May 2013

Nanjing, China

• Designed and developed the official website of LE China 2013 to help with recruiting and funds seeking

HONORS AND AWARDS

Outstanding Graduate of Nanjing University (top 10%)	2015
Elite Program Outstanding Scholarship (12,000 CNY)	2014, 2013
Outstanding Collegiate Student of Jiangsu, China (top 0.3%)	2014
COMAP Mathematical Contest in Modeling (MCM) Award Meritorious Winner	
CUMCM Award, Third Class Contest Prize of Jiangsu District	
Outstanding Student of Nanjing University for Academic Excellence (top 3%)	
Outstanding Student of Depart. of Computer Science & Technology for Leadership (top 3%)	
Elite Program First Class Scholarship (8,000 CNY)	2012

SELECTED PROJECTS

Automatic Knowledge Learning System from Textbooks (Machine Learning)

Aug 2015-Present

- Propose a novel and general approach to construct knowledge systems directly from textbooks
- Design a model to automatically solve mathematical problem with the help of the knowledge system

Multi-Algorithm Search Framework (Search Engines)

Aug 2015-Present

• Built a Java-based retrieval framework that consists of Boolean, BM25, Indri retrieval algorithms

Compiler for Self-designed C- Language (Principles and Techniques of Compiler) Feb 2014-Jun 2014

- Designed and developed a compiler based on lex and yacc for the self-designed language C-
- implemented modules e.g. lexical & syntactic check, semantic analysis, intermediate and target code generation

Analysis of the "Keep-Right-Except-to-Pass-Rule" (2014 MCM Problem A)

Jan 2014-Feb 2014

- Designed and established the mathematical model to describe vehicle behaviors in a microscopic way
- Carried out simulation and analysis with VISSIM and Matlab and was designated as Meritorious Winner

NanOS Project (Operating System)

Feb 2013-Jun 2013

- Designed and developed a micro-kernel operating system capable of executing user programs
- Implemented modules including context switching, message mechanism, system calls and user process

Ontology Based Recommender System (National Innovation Project)

May 2012-May 2013

Developed an item-based collaborative movie recommendation system based on semantic ontologies

SKILLS

Programming Languages C/C++, MATLAB, Python, Java, HTML5, LATEX

Operating System MacOS, Windows, Ubuntu, Debian

ACTIVITIES AND LEADERSHIP

Membership	Microsoft Research Asia (MSRA) Student Alumni	May 2014-Jun 2015
	MOOC Chinese Subtitle Translation Group for Coursera	2012-2015
Participant	Microsoft Summer Camp Beijing 2014 (Invitee)	Aug 2014
	Microsoft YouthSpark Live 2014	May 2014
Primary Organizer	Academic Visit to Hong Kong universities, including HKUST, HKU,	etc Aug 2012
Student Volunteer	The 110th Anniversary of Nanjing University	May 2012
	The 11th CRSSC National Conference	Dec 2011