Junnan Chen

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EDUCATION & PROFESSIONAL EXPERIENCES

University of Waterloo Sept 2015 - Present
Master Candidate, School of Compute Science, Thesis-based, Supervisor: Ming Li
Research Assistant in Natural Language Processing Lab.
Teaching Assistant for CS135, CS370.

University Of Waterloo Sept 2014 - Apr 2015
Undergraduate Exchange Program, School of Computer Science.

Tsinghua University Sept 2011 - Jul 2015
Bachelor of Engineering, Department of Computer Science and Technology.
Double major in Digital Design, School of Art.

TECHNOLOGY SKILLS

Programming Languages: Java, Python, C++, JavaScript, HTML, CSS, SQL.

Technical expertise: Machine Learning Algorithms, Data Structures, Keras, TensorFlow.

RESEARCH EXPERIENCES

Chinese Named Entity Recognition in Query with Limited Data
Research Project, Supervisor: Ming Li *Oct 16 – Present*

- Detection of named entities in a given short query and the classification of the named entity into a precise class.
- Built a hybrid model combining Weakly-Supervised LDA model with deep neural networks.
- Addressed the problem of lacking training data by implementing a novel application to extracting entities and precise classes using limited answered queries.

Chinese Microblogs and Stock Market Index Correlation Study
CS685 Machine Learning Course Project, U of Waterloo *Mar 16 – Apr 16*

- Proposed novel method to vectorize the sentiment data from Chinese microblogs.
- Constructed DNN model using Convolutional Neural Networks to verify that microblogs data are related to the stock market.
- Project implemented by Keras.

University of Waterloo Online Routing System
CS889 HCI Course Project, U of Waterloo *Oct 15 – Dec 15*

- Online Routing System provides in-building routes based on personal preferences across building groups.
- Mapping physical features of routes with human feelings (e.g. hurry, tired).
- Developed font end and back end with JavaScript, Html5 and Python individually.

Chinese Story Extraction from Large Document
Graduation Thesis, Supervisor: Ming Li *Feb 15 – Apr 15*

- Proposed Sentence Rank algorithm to determine the start / end sentences of Chinese stories in large document.

- Designed and implemented a Chinese Story Extraction method based on BM25, PageRank and Sentence Rank algorithms.
- Given a query, it can extract the related story correctly and efficiently from the large document.

WORK EXPERIENCES

Future Price Trend Prediction based on Deep Neural Networks
Quantum Cube Corporation, Machine Learning Researcher *Apr 16 – Sept 16*

- Developed deep-learning algorithms in application to commodity future trading.
- Developed novel data labeling method which detects multi-scale trends and waves.
- Built neural networks combined multi-timescale LSTM layers and CNN layers to predict future trends.

Mobile Picture and Audio generator on Wechat Platform
Tencent Inc, Shenzhen. Software Developer *Jul 14 – Aug 14*

- Established a real-time audio segmentation splicing process on Wechat platform.
- Established a picture hotspot display front end on Wechat platform.
- Designed and implement a Wechat Serve Chanel.

AWARDS

Provost Master's Entrance Award for Women **Year 2015**
Award for outstanding full-time female students.

Jimin Liu Scholarship **Year 2014**
Scholarship for exchange students from Tsinghua University to University of Waterloo