Rohit Dholakia

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Education

Sept 2012–Dec 2013 MSc in Computing Science, Simon Fraser University, British Columbia, Canada, 3.6/4.0.

(Expected)

Under the guidance of Dr. Anoop Sarkar, I have been working on improving translation models for low-resource languages. Specifically, my thesis is an empirical and qualitative study of Triangulation in a real low-resource scenario, using Haitian-Creole.

2006–2010 B. Tech in Computer Science, SASTRA University, Tamilnadu, India, 7.98/10.0.

Under the guidance of Dr Sairam, I implemented Collaborative filtering algorithms for the MovieLens dataset, and also incorporated some of the findings of the Netflix prize

Projects

Fall 2012 Haitian-Creole Machine Translation

Extensive results on the feasibility of efficient Machine Translation for noisy Haitian-Creole SMS

Mentor: Dr. Anoop Sarkar, Natural Language Lab, SFU

Language: Python

Spring 2012 Mining StackExchange

Mined complete StackExchange dump(22G). Found that majority of users stop contributing after attaining a badge, average time to answer is low all across stackexchange.

Mentor: Dr. Jian Pei, Data Mining Lab, SFU

Language: Python

Spring 2012 Large-scale Truecasing using Distributed Language Models

Proved that Redis can handle more than 200 concurrent clients answering several language model queries

swiftly. Language Model used was gigaword generated using 1200 million words

Mentor: Dr. Arrvindh Shriraman, Systems Lab, SFU

Language: Python

Summer 2013 Implementing core algorithms of Machine Translation

IBM Models, Decoding, Reranking and Evaluation metrics

Mentor: Dr. Anoop Sarkar, Natural Language Lab, SFU

Language: Python

Work Experience

Fall 2012 - Present Research Assistant: Natural Language Lab, SFU

Summer 2013 Teaching Assistant: CMPT 300 - Operating Systems

July, 2011 - June, 2012 Software Developer, MoveInSync Technologies, Hyderabad.

- o Designed, implemented and deployed an end-to-end automation framework using Selenium 2 to build, test and deploy the product for every build.
- o Designed, and implemented a multi-threaded Java application to simulate large workloads for the application with the aim of finding loopholes that only come up at scale

July, 2010 - May, 2011 Project Associate, SIEL, IIIT Hyderabad.

- o Led a Nokia-funded project to develop and deploy small yet accurate CRF models to enable short messages in 6 major Indian languages, on MeeGo platform using only 128MB of RAM
- o Improved transliteration engine of a cross-lingual search engine for Indian languages, using large-scale CRF models. Brought accuracy from 60% to more than 75% for all the languages.

Awards

Graduate Fellowship Fall 2013

Technical Skills

Languages C, Java, Python, SQL

Toolkits Moses, Kriya, Eclipse, Redis

Coursework

Big Data Mining, Algorithms, Natural Language Processing, Multi-Core Systems, Machine Translation