Rohit Dholakia

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Education

Sept 2012-April 2014 MSc in Computing Science, Simon Fraser University, British Columbia, Canada, 3.6/4.33. My dissertation, supervised by Dr Anoop Sarkar, resulted in significantly better translation models for four different and very resource-poor languages, using the approach of triangulation.

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

Publications

Oct 2014 Pivot-Based Triangulation for Low-Resource Languages, AMTA 2014

Work Experience

June 2014 - Computer Scientist, Simba Technologies, Vancouver.

• Project lead working on a real-time compression protocol for ResultSets

Feb 2014 - May 2014 NSERC Engage Internship, 2hat Security, Kelowna.

o As part of an ENGAGE grant, built Machine Learning models to classify noisy chat snippets that could classify with 70% accuracy. Also wrote a Language Identification module for the chat snippets.

Fall 2012 - Feb 2014 Research Assistant: Natural Language Lab, SFU

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.

Projects

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 stackerchange.

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

Language: Python

Spring 2012 Large-scale Truecasing using Distributed Language Models

Using Redis, 200 concurrent clients were run to perform truecasing with a gigaword language model (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

Awards

Graduate Fellowship Fall 2013

Technical Skills

Languages C, Java, Python, SQL

Toolkits Moses, Kriya, Eclipse, Redis, Apache Hadoop, Apache Hive

Coursework

Big Data Mining, Algorithms, Natural Language Processing, Statistical Machine Translation