

## MILI SHAH

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### EDUCATION UNIVERSITY OF MASSACHUSETTS AMHERST

Master's in Computer Science, September 2017 – May 2019

### NIRMA UNIVERSITY

Bachelor of Technology, Computer Engineering, August 2013 – May 2017

### EXPERIENCE MORGAN STANLEY | Technology Analyst Intern

May 2016 – July 2016

- Worked to automate level-1 support for java developers of Morgan Stanley
- Constructed a system in Python to cluster queries to analyse topics and to match new query e-mails with mined previous discussions and wiki pages

### INFORMATION EXTRACTION AND SYNTHESIS LAB | Graduate Student Researcher

- Working with Prof. Andrew McCallum for multi-sentence relation extraction from biomedical text
- Previously worked on extending rowless universal schema LSTM model for automatic knowledge base completion using complex embeddings to capture asymmetry in relations
- Achieved a mean reciprocal rank of 33 with implementation in Python using Tensorflow

### PROJECTS GOOGLE: LARGE-SCALE COMMONSENSE AS LEXICAL ENTAILMENT | Graduate Student Researcher

January 2017 – Present

- Working with Mr. Chris Welty and Prof. Lora Aroyo to construct a common-sense hypernym taxonomy from Microsoft Concept Graph, WordNet and crowdsourcing
- Use the constructed taxonomy to train partial-order structure preserving embeddings for better performance on downstream tasks like semantic web search and text understanding

### CHARACTER IDENTIFICATION ON MULTI-PARTY DIALOGUES

September 2017 – December 2017

- SemEval 2017 task to build an efficient character identification system using supervised learning
- Achieved a mean precision of 71% in coreference resolution with agglomerative Convolutional Neural Nets implemented in Python using Tensorflow

### STUDYING IMPACT OF INTERNATIONAL STOCK MARKETS ON INDIAN STOCK MARKETS

August 2016 – November 2016

- Built Support Vector Regression predictive models for stock markets in Python achieving a mean absolute error of 1.1%
- Performed a causality analysis study between different stock markets using these models

### CLASSIFICATION OF MALWARE FILES

July 2015 – November 2015

- Built a system in Python using NLTK, scikit-learn modules to classify malware files
- Achieved an accuracy of 91.5% using weak Decision Tree learners with AdaBoost ensembling

### SHUTTERING PLATES MANAGEMENT SYSTEM

October 2014 – Dec 2014

- A desktop application of stock management developed for a business
- Implementation in Java using Swing with MySQL database

### COURSES Machine Learning, Neural Networks, Algorithms for Data Science, Natural Language Processing, Big Data Analysis, Advanced Data Structures, Database Management Systems, Operating Systems

### TECHNICAL SKILLS Languages: Python, Java, R, C, C++, JavaScript

**Library Familiarity:** Tensorflow, Keras, Scikit-learn, Spacy, CoreNLP, NLTK, FastText

**Databases:** SQL, MongoDB

**Frameworks:** Hadoop