#### Eva Sharma

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#### RESEARCH INTERESTS

Social Computing Computational Social Science

Online Communities Natural Language processing

#### **EDUCATION**

#### Georgia Institute Of Technology, Atlanta, GA

Aug 2016 - Present

Doctor of Philosophy, Computer Science

## Cornell University, Ithaca, NY

Aug 2014 - May 2015 GPA 3.87 / 4.0

Masters of Engineering, Computer Science

### Massachusetts Institute of Technology, Cambridge, MA

Aug 2011 - Jan 2012

Bachelors of Technology (Semester Abroad Program),

GPA 5.0 / 5.0

SRM University, Chennai, TN, India

Electrical Engineering and Computer Science

July 2009 - May 2013 GPA 9.86 / 10.0

Bachelors of Technology,

Computer Science (Gold Medalist)

#### WORK EXPERIENCE

### Oracle, Cambridge, MA

July 2015 - Aug 2016

Software Developer II

• Implemented Multiple Payment and Address Book Module for Mobile Commerce iOS Application

#### SAP Labs India Pvt. Ltd. Bangalore, India

July 2013 - July 2014

Associate Developer

- Worked on Software Logistics Process Repository for Lifecycle Management of SAP Software
- Designed and implemented installation and update feature for HANA Application Lifecycle Management
- Co-Implemented delete and copy stack backend functionality for Cross Product Stack Editor

# SAP Labs India Pvt. Ltd. Bangalore, India

Feb. 2013 - June 2013

- Intern
- Analyzed Customer Profile Data in XML format by automating processing of XMLs and feeding them to HANA database where the data can be later visualized as graphs
- Built an interface which utilizes gestures and voice to interact with computers.

#### **TEACHING**

#### Cornell University, Ithaca, NY

Spring 2015

Teaching Assistant

Prof. Lucja Kot, CS 4320/5320 Introduction to Database System

• Setting up homework, holding office hours to solve students doubts and grading exams and homework

#### **PROJECTS**

#### Semantic Legal Information System's

Jan. 2015 - May. 2015

#### Legal Text Indexing Application

Sara S. Frug, Legal Information Institute, Cornell University

- Studied and experimented with Topic Modeling for CFR Corpus using several tools
- Handled scaling problem for CFR corpus by pre-processing like lemmatization, etc

- Used metadata from CFR and FR corpus to capture evolution of a topic over time
- Experimented with incremental modeling and phrase extraction using Mallet
- Carried out an in depth analysis in order to understand the results

# Computing a statistical description of 3-D structure of nano-scale biological objects

Oct. 2014 - Dec. 2014

Prof. Peter Charles Doerschuk, Cornell University

- Helped providing python conversion of MATLAB equivalent of fmincon, which solves nonlinear programming problems, fundamentally computing the location of the minimum value of a user-provided function
- Applied MATLAB version of the project to example problems to determine the input values for each of the project's functions and the returned values.
- Wrote unit test cases in python to perform extensive testing for the python version of the project

#### Question Answering System

Mar. 2015 - Apr. 2015

Cornell University

- Built a QA system which could answer Who, When, Where and What questions with 21% accuracy
- $\bullet$  Experimented NLTK for tokenizing , Stanford Core NLP for POS tagging and NER and synsets from WordNet for query reformulation
- Implemented Rocchio algorithm based on relevance feedback to improve retrieval of relevant text containing answer to the concerned question

#### Mini Search Engine

Oct 2014 - Dec 2014

Cornell University

- $\bullet$  Built a search engine for more than 5000 documents and created a direct index for measuring similarity with 50+ queries.
- Experimented with various similarity measures based on the smart notation and compared their mean average precision.
- Experimented with clustering and relevance feedback techniques to study their effects on ranking of results.

#### Roll Of Honor Website

Oct 2014 - Dec 2014

Cornell University

• Created a website to maintain a digital war memorial to honor Cornells war veterans for Cornells Carl A. Kroch Library

#### Sound Source Localization

Sep. 2011 - Dec. 2011

Massachusetts Institute of Technology

Prof. James R Glass, Spoken Language System Group, CSAIL

- Studied various techniques being used for 2-D acoustic localization
- Implemented GCC-PHAT method to localize sound using two microphones MATLAB

#### Voice Interface Design

Sep. 2011 - Dec. 2011

Massachusetts Institute of Technology

- Designed, implemented and presented a voice interface on an existing speech recognition system, which provides users a live voice tour of MIT
- Designed, implemented and presented another voice interface on an existing speech recognition system, which provides users with an interactive personal medical assistant

#### RESEARCH

#### Cornell University, Ithaca, NY

Dec 2014 Jan 2015

Research Assistant

Prof. Diane Burton

• Automating the process of information retrieval from PDF Forms JAVA

#### ACHIEVEMENTS AND AWARDS

- Undergraduate Gold Medalist, Awarded by The Prime Minister of India, Mr. Narendra Modi
- Undergraduate Toppers Scholarship, Perfect GPA of 10.0/10.0 Award for 3<sup>rd</sup>, 6<sup>th</sup> and 8<sup>th</sup> semesters

#### COMPUTER SKILLS

Programming Languages: Java, Python, C, C++, MATLAB, Objective C, Swift, ABAP, HANA

Web Development: HTML, PHP, SAP UI5, JavaScript, Java Servlet, CSS, Adobe Photoshop, Drupal

NLP Tools: Maui, RAKE, Mallet, NLTK, Stanford Core NLP, Lucene

Expertise in GNU Linux

#### **EXTRA-CURRICULAR ACTIVITIES**

- Completed Training in Wild Life Protection And Environment Preservation conducted by Forest Department, North Kheri, U.P.
- Volunteered in three Community Service Events in SAP Labs held to serve HIV positive Children in Catholic Charity Houses in Bangalore.
- Volunteered for Product Innovation Day Event in SAP Labs, Bangalore.
- Participated in Hadoop Tech Talk conducted at Exebit 2012, IIT Madras.
- Participated in Ethical Hacking and Information Security Workshop by Kyrion Technologies.
- Organized Paper Presentation event held at Infoyez11, SRM University, Chennai.