# Harshit Agarwal

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#### **EDUCATION**

### University of Illinois At Urbana Champaign

#### **BS in Computer Science**

Expected May 2018 | Urbana, IL GPA: 3.7/4.0

College of Engineering Dean's List Fall 2014, Spring 2016 James Scholar Course Staff for Honors Intro to CS

## **COURSEWORK**

Applied Machine Learning Text Information Systems Systems Programming Database Systems Theory I (Algorithms) Computational Photography Distributed Systems

#### SKILLS

#### **PROGRAMMING**

Experienced:

Python • Java • C++ • C Matlab • SQL • MongoDB Familiar:

Shell • JavaScript • R • Go

HTML • CSS • MIPS

Other Technologies:

Kafka • Storm • Spark

 ${\sf ElasticSearch} \bullet {\sf TensorFlow}$ 

ScikitLearn • Avro • PCL • Mesos

## **EXPERIENCE**

#### SALESFORCEIQ | SOFTWARE ENGINEERING INTERN

June 2016 - Present | Palo Alto, CA

- Built a SalesforceIQ bot for Slack, which enables users to get push notifications and make simple queries through Slack
- Made multiple additions to the existing API and built the architecture for SalesforceIQ's internal webhooks
- Worked on a range of dev-ops tools to improve internal Github and Jira integrations

#### STATE FARM | SYSTEMS INTERN

May 2015 - Aug 2015 | Urbana, IL

- Built an in car gesture recognition system to detect distracted driving using computer vision, working with a point cloud capturing device
- Created a customer retention model by using topic modeling on Twitter data and combining it with a logistic regression model to predict customer attrition

#### RESEARCH

# FORWARD LAB AT UIUC | UNDERGRAD RESEARCHER

August 2015 - May 2016 | Urbana, IL

Worked with Professor Kevin C. Chang to create a context aware web mining tool to better identify and classify relevant data on unstructured web pages and to group together potentially related data such as contact details using text based and visual markers. Built a chrome app in Javascript with a backend in Python

#### **PROJECTS**

#### ML-PARTY | QUALCOMM PRIZE AT BOILERMAKE 2015

October 2015 | github.com/hagarwa3/ml-party

A basic machine learning library in Python, built using only Numpy. Implemented KNN, Naïve Bayesian classifier, linear regression and Logistic regression. Built in Python

#### TRUMPBOT | MARKOV CHAIN CHATBOT

March 2016 | harshit.xvz/chatbot

A conversational Markov chain chat bot that can be trained on any corpus of text. Trained it on transcripts of Donald Trump's speeches, and deployed it through Twilio and a web app. Built using Python, Flask and Twilio

# SEARCHOVERFLOW | SMART SEARCH ENGINE FOR STACK OVERFLOW DATA March 2016 | github.com/hagarwa3/stackoverflow-search

Used the StackOverflow data dump and ElasticSearch to create a search engine, and trained a keyword extraction algorithm to build smart queries. Also used the indexed data to gather insights regarding people's question on StackOverflow. Built using Python, ElasticSearch, Flask and Shell

#### **ACTIVITIES**

# ASSOCIATION OF DATA SCIENCE AND ANALYTICS | PROJECTS COMMITTEE

Jan 2015 - Present | Urbana, IL

- Work on a different data based project every semester. Past projects have included stock trend prediction and search relevance prediction
- Organized sample projects and resources for workshops on Spark, databases, Python, basic machine learning and basic NLP
- Organized the ADSA Data Summit, UIUC's first student run big data conference