# 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 James Scholar

### LINKS

harshit.xyz github.com/hagarwa3 linkedin.com/in/hagarwa3

# COURSEWORK

Applied Machine Learning
Text Information Systems
Systems Programming
Database Systems
Algorithms
Computational Photography
Computer Architecture
Linear Algebra
Statistics and Probability
Fall 2016
Social and Information Networks
Distributed Systems

#### SKILLS

#### **PROGRAMMING**

Experienced:

Python • Java • C++ • C

Matlab • MIPS • SQL • MongoDB Familiar:

Shell • JavaScript • R

HTML • CSS

Other Technologies:

Kafka • Storm • Spark

ElasticSearch

#### **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 integration related additions to the existing API and built the architecture for SalesforceIQ's internal webhooks
- Worked on multiple 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 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

#### **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 and obtained results remarkably similar to scikit-learn. Built entirely in **Python** 

#### TrumpBot | Markov Chain Chatbot

March 2016 | harshit.xyz/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** | A smart search engine for stack overflow

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

- $\bullet \ \ \text{Work on a different data based project every semester. Past projects have included}$
- stock trend prediction and search relevance prediction.

  Organized sample projects and resources for workshops on Spark, databases, Bytho
- 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