

# 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](http://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](http://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