

# Harshit Agarwal

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## EDUCATION

### UNIVERSITY OF ILLINOIS AT URBANA CHAMPAIGN

#### BS in Computer Science

Expected Dec 2017 | Urbana, IL

GPA: 3.66/4.00

#### MS in Computer Science

Expected Dec 2018 | Urbana, IL

College of Engineering

Dean's List Fall 2016, Spring 2016

James Scholar

Course Staff for Honors Intro to CS

## COURSEWORK

Applied Machine Learning

Text Information Systems

Adv. Distributed Systems

Adv. Social and Information Networks

Computational Photography

AI for Autonomous Vehicles

Database Systems

FALL 2017

Machine Learning for Signal

Processing

## SKILLS

### PROGRAMMING

Experienced:

Python • Java • C++ • Scala

C • Matlab • SQL • MongoDB

Familiar:

Shell • JavaScript • R • Go

HTML • CSS • Haskell • MIPS

Other Technologies:

Kafka • Storm • Spark

ElasticSearch • TensorFlow

ScikitLearn • Avro • PCL • Mesos

OpenCV • Akka

## EXPERIENCE

### SALESFORCE.COM | DATA ENGINEERING INTERN

June 2017 - Present | Palo Alto, CA

- Intern on the Salesforce's Einstein Platform team. Building an updated data delivery and verification architecture for scoring results for leads processed by the platform's models.

### SALESFORCEIQ | SOFTWARE ENGINEERING INTERN

June 2016 - August 2016 | Palo Alto, CA

- Built a SalesforceIQ bot for Slack, which enables users to get push notifications and make simple queries through Slack
- Created the architecture for SalesforceIQ's internal webhooks

### STATE FARM | SYSTEMS INTERN

May 2015 - Aug 2015 | Urbana, IL

- Built an in car gesture recognition system to detect distracted driving.

## RESEARCH

### CROWD DYNAMICS LAB AT UIUC | UNDERGRAD RESEARCHER

August 2015 - May 2016 | Urbana, IL

Worked with Professor Hari Sundaram to analyze the evolution of a person's behavior in different communities. Using Gaussian HMMs and network analysis to cluster behavior change patterns in different online and real life communities.

### DISTRIBUTED PROTOCOLS RESEARCH GROUP

August 2015 - May 2016 | Urbana, IL | [harshit.xyz/GNuggies.pdf](https://harshit.xyz/GNuggies.pdf)

Worked with Professor Indy Gupta. Working on a model and simulation for a publicly hosted cloud with the ability to automatically scale in and scale out services with varying demands.

## PROJECTS

### SELF DRIVING RC CAR | ARDUINO AND OPENCV POWERED CAR

October 2016 | [github.com/hagarwa3/self\\_driving\\_rc\\_car](https://github.com/hagarwa3/self_driving_rc_car)

An Arduino powered car that can navigate a simple track and detect objects, via an attached camera and a RaspberryPi. Also includes a streaming setup to view and control the car's movement remotely. Built with Python, OpenCV, ScikitLearn and Arduino

### SEARCHOVERFLOW | SMART SEARCH ENGINE FOR STACK OVERFLOW DATA

May 2016 | [github.com/hagarwa3/stackoverflow-search](https://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. Built using Python, ElasticSearch, Flask and Shell

## ACTIVITIES

### ASSOCIATION OF DATA SCIENCE AND ANALYTICS | PRESIDENT

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