

# AYUSH K SINGH

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## EDUCATION

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### Northeastern University

Boston, MA

*Master of Science in Computer Science*

*Expected - Dec. 2017*

- Coursework: Machine Learning, Distributed Systems & Cloud Computing, PGM & Parsimonious Modeling, Cognitive Computing & Deep Learning, Parallel Data Processing in MapReduce
- Researching on parameter estimation and finding elimination ordering in bipartite clinical PGM.
- Mined 27 years worth of BTS airline data to find top  $n$  least delay, hops and predict cheapest flights.
- Received Graduate Certificate in Data Analytics *i.e.* Stats, Mining, Storing, Visualization.
- Built a VM to provision on premise resources from AWS for scaling apps at peak workloads.
- Developed a learning to rank game rating system improving conventional rating system by 8%.
- Developed command line interface to simulate Unix shell and file system in C.

### Graphic Era University

Dehradun, India

*Bachelor of Technology in Computer Science & Engineering*

*Sept. 2010 - Aug. 2014*

- Coursework: Software Engineering, Design & Analysis of Algorithms, Computer Architecture, Computer Networks, Operating System Concepts, Database Management Systems, OOP Concepts
- Location based Online Grocery Store
  - Developed a responsive single page app in MEAN storing sessions in Redis.
  - Devised tool to monitor inventory, track sales & app performance using statsD - Graphite.
  - Built an item-item similarity based collaborative filtering recommender using Spark MLlib.
- Developed Official College Festival website using JavaScript, and Google Docs API.

## EXPERIENCE

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### TripAdvisor

Boston, MA

*Software Engineer Co-op*

*May 2016 - Dec. 2016*

- Improved personalization from time weighted to collaborative filtering getting 17% sales hike.
- Built an end to end admin app for support team to update subscribers details in MEAN Stack.
- Developed log processor to categorize, process and visualize exim logs in python, Kafka, ELK.
- Built personalized attractions and subject line recommender at hack days in R, python.

### Indian Defense Research and Development Organization

Agra, India

*Intern*

*July 2013 - Sep. 2013*

- Converted entire paper oriented equipment demand system to online portal for Scientists.
- Built an end to end app using LAMP stack reducing the application processing time by 20%.

## SKILLS

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### Languages

C, Java, Python, JavaScript, Julia, Shell,  $\text{\LaTeX}$

### ML

Theano, TensorFlow, Keras, CNTK, scikit-learn, MXNet

### Databases

MySQL, RedShift, MongoDB, Elasticsearch, Solr, Redis, HBase

### Big Data

R, Spark, Map Reduce, Hive, Pig, ELK, Kafka, Tableau, AWS, OpenStack

### Web

HTML, CSS, JSP, PHP, NodeJS, AngularJS, ReactJS, jQuery, Django, SpringMVC