

# ASHU GUPTA

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## CONTACT INFORMATION

Graduate Student  
Department Of Computer Science  
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## EDUCATION

### University Of Illinois Urbana-Champaign

M.S. in Computer Science, May 2016

- GPA: 4.0/4.0
- Advisor: Dr Tandy Warnow

### IIT Kanpur, Kanpur, India

B.Tech in CSE, June 2014

- GPA: 9.5/10.0
- Awards: Academic Excellence

## SUMMER INTERNSHIPS

### Apple Inc, Cupertino, USA

#### Real-time analytics on Spark

Software Engineering Intern

Summer 2015

- Developed spark application + web server to monitor media performance in real-time
- Deployed the application on multi node cluster on Amazon EC2 using CDH stack
- **Technologies:** SCALA, Flume, Spark, Yarn, Play Framework, HighCharts, Amazon EC2, CDH

### IBM Research, New Delhi, India

#### Computing Iceberg Cubes on Hadoop

Dr Rajeev Gupta, Dr Prasad M Deshpande

Summer 2014

- Developed a novel MR algorithm on Hadoop for finding iceberg cube efficiently.
- Reduced map output and network cost by an efficient hybrid batching scheme.
- **Technologies:** Hadoop, JAVA

### Microsoft Research, Redmond, WA, USA

#### Big Data Processing on GPU

Dr Jin Li, Dr Sudipta Sengupta

Summer 2013

- Designed an efficient parallel algorithm for K-means clustering algorithm for Big Data.
- Obtained 500x speedup of K-means algorithm on NVidia GTX TITAN
- **Technologies:** Nvidia GPU, CUDA, C++

## ACADEMIC ACHIEVEMENTS

- Received Academic Excellence Award for the term 2010-2014 at IIT Kanpur.
- Secured All India Rank -127 in IIT JEE 2010 among 400,000 applicants.
- SAT subject Test (Physics, Chemistry, Mathematics-II) score 2400/2400

## HOBBY PROJECTS

### Web App: Music Database and Recommendation system

Demo: <http://web.engr.illinois.edu/~agupta80/musicDB/>

- Web-app of music database with collaborative filtering based recommendation system at back-end
- **Technologies:** HTML/CSS, PHP, postgresSQL, Ajax, Youtube API, Java

## RELEVANT COURSES

**Data Analytics & AI:** Advance Data Mining, Machine Learning, AI, Database Systems  
**Systems:** Distributed Systems, Computer Architecture, Compilers, OS, Computer Networks  
**Computer Science:** Data Structure and Algorithms, Functional Programming, Computer Graphics

## TECHNICAL SKILLS

- **Languages:** C/C++, SCALA, JAVA, PYTHON, CUDA, MATLAB
- **Tools:** OPENGL, WEKA, HADOOP, SPARK, YARN, AMAZON EC2, CDH
- **Web:** HTML 5, PHP, JAVASCRIPT, SQL, PLAY FRAMEWORK

## POSITION OF RESPONSIBILITY

- Coordinator of event Rube-Goldberg in Techkriti'13 at IIT Kanpur.
- Student Mentor and a member of Counseling Service at IIT Kanpur.

## HACKATHONS

- Bagged 2<sup>nd</sup> position and Won cash prize of 400\$ in Allstate Hackathon 2014 at UIUC
- Created Web App to give music recommendations based on mood at Yahoo HackU.