# Shubham Agrawal

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## EDUCATION

### IIT, KANPUR
B.Tech in Computer Science
Expected Apr 2017
CPI: 8.9

### PRE UNIVERSITY
St. Joseph's School, Kota, Rajasthan
Grade $12^{th}$
Percentage: **94**
Grade $10^{th}$
CGPA: **10**

## LINKS

Github://submagr
LinkedIn://shubham-agrawal

## COURSEWORK

Machine Learning Tools
Natural Language Processing
Recent Advances in Vision
Optimizations Techniques
Operating Systems | A*
Compiler Design
Computer Networks
Computer Security
Computer Organization
Advanced Algorithms
Data Structures and Algorithms
Theory of Computation
Linear Algebra
Discrete Mathematics
Abstract Algebra
Probability and Statistics

## SKILLS

### PROGRAMMING
Over 5000 lines:
Python • C • C++
Over 1000 lines:
Go • Javascript • CSS • HTML • PHP
MySQL • MongoDB
Familiar:
Matlab •Material Design

### LIBRARIES
Keras, Theano, Scikit-Learn, Caffe

### TOOLS
Vim, Solidworks, Linux, Windows

## AWARDS

| | | |
|---|---|---|
| 2013 | All India Rank 191 | IIT-JEE ADVANCED among 1,50,000 candidates |
| 2013 | All India Rank 1234 | JEE-MAINS among 14, 00,000 candidates |
| 2014 | Academic Excellence Award | DOAA, IIT Kanpur |
| 2015 | BEST ROOKIE TEAM | BAJA STUDENT INDIA |

## EXPERIENCE AND PROJECTS

### ADOBE | Research Intern
May-July 2016 | Big Data Experience Lab, Bangalore

- Geo-fences are created by identifying areas with high values of user interest. To unsheathe the interest from sparse location tagged browsing data, algorithm captures intrinsic interest of user, trends at semantically similar locations and similarity between products and users.
- Achieved precision was 5 times higher than existing geo-fence. Created user-friendly marketer's dashboard where marketer can manage geo-fence and get useful inferences about product sale. We will soon be submitting paper and filing patent

### PARIKSHA.CO | Research + Web Developement Intern
May-July 2015| Pune

- Engineered an algorithm that adaptively recommend questions depending upon student's performance and question ratings.
- Modeled and programmed scalable adaptive question recommender system using GO language and MongoDB database as a micro service.
- Implemented Pariksha Practice Section for adaptive content and a Gamification engine with impact on 20K students

### MULTIPLE KERNEL LEARNING | Undergraduate project
Jan - Apr 2015 | IIT Kanpur

- Explored relative kernel hilbert space, multiple kernel learning algorithm and hierarchical kernel learning. Project was focused around multiple kernel learning to analyze effects of linear combination of different kernels over classifier.
- Extracted surf and convolutional deep-net (pre-trained BVLC GoogleNet model) features for Caltech multiclass object classification dataset containing 102 categories. Implemented Simple MKL algorithm and studied effects of linear combination of distinct kernels on svm classifier.

### COURSE PROJECTS

Optimization
Vision
NLP
MLT
Compiler
OS

## MISCELLANEOUS