

# Rishabh Joshi

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## EDUCATION

### BITS PILANI

B.E. (Hons.) Computer Science  
Expected Aug 2018 | Pilani, India  
Cum. GPA: 9.27 / 10

### AISSCE (CLASS XII)

Mother's International School  
Grad. May 2014 | New Delhi, India  
Score: 478 / 500

### AISSE (CLASS X)

Mother's International School  
Grad. May 2012 | New Delhi, India  
GPA: 10 / 10

## LINKS

Facebook://rishabh.joshi.047  
GitHub://rishabhjoshi  
LinkedIn://rishabh-joshi-887351b2  
Codeforces://rishabhjoshi

## COURSEWORK

Information Retrieval  
Neural Networks and Fuzzy Logic  
Machine Learning  
Operating Systems  
Database Systems  
Computer Graphics  
Data Structures and Algorithms  
Object Oriented Programming  
Computer Architecture

## SKILLS

### PROGRAMMING

Over 3000 lines

• C • C++ • Python

Familiar

• x86 Assembler • Prolog • R  
• MySQL • Java • C# • OpenGL

### DATA ANALYTICS

• scikit-learn • GraphLab

## EXPERIENCE

### ISRO | SUMMER RESEARCH INTERN

May 2016 - July 2016 | Dehradun, India

- Developed the DataCube for Uttarakhand using GeoSpatial Technologies for IIRS
- Analytical framework provides effective storage, retrieval and analysis of GBs of satellite data
- Determined best GIS image storage formats for storing GBs of image data
- Developed the core API and Execution engines of the DataCube
- Created algorithm templates to obtain products from Satellite data on the web portal

## MAJOR PROJECTS

### BITS LIFEGUARD | MENTOR: DR. RAHUL BANERJEE | HOD CSE, BITS PILANI

Oct 2015 - Present | Research Assistant

- Developing a fault-tolerant, cost-effective smart driver safety jacket with real time monitoring of vital signs, to prevent road accidents and taking emergency action in the unlikely case an accident occurs
- Developed Bluetooth Authentication and intercommunication techniques for low computing capability sensor nodes
- Currently working on sensor fusion for LifeGuard

### WEARABLES SENSOR FUSION | MENTOR: DR. RAHUL BANERJEE

August 2016 - Present | Study Project

- Working on Adaptive learning aspects of Body Sensor Networks and sensor data fusion
- Finding and implementing accurate Sensor Fusion algorithms to classify driver stress using physiological sensors
- Measuring the accuracy of the models created on various public driving datasets

### E-YANTRA | IIT-BOMBAY | MHRD, GOVT. OF INDIA

18th March 2016 - 19th March 2016

- Represented BITS Pilani and came 2<sup>nd</sup> out of 57 teams from all over India in the finals of e-Yantra, a robotics competition
- Coded the Firebird-5 bot over a span of 3 months to solve the problem statement of a Hotel Room Service scenario

## MINI PROJECTS

### PSO OPTIMIZED K-MEANS

- Studied and implemented Particle Swarm Optimization and Ant Colony Optimization techniques to improve Clustering performance of K-Means

### HEADING GENERATION USING SPEECH PHONETICS

- Created web crawler to collect speech audio data and generated a summary and its heading by using phonetics and tone of the speaker

## ACHIEVEMENTS

|         |  |
|---------|--|
| 2016    | National finalist in Microsoft's Build The Shield CTF Competition  |
| 2014/15 | Recipient of Institute Merit Scholarship for academic excellence   |
| 2014    | 1574 - AIR (All India Rank), IIT-JEE Examinaion (of 1 mil+)        |
| 2014    | Recipient of Govt. of India's INSPIRE scholarship (top 1% in CBSE) |
| 2014    | Board Topper in Chemistry in Board Examination (100 / 100)         |
| 2014    | School Topper in Computer Science in Board Examination (99 / 100)  |
| 2012    | Junior Science Talent Search (JSTS) Scholar                        |