

# Saurabh Kumar

Curriculum Vitæ | <http://saurabhkumar.com>

## Work Experience

May 2017 - July 2017

### Google Summer of Code, Wikipathways

#### Summer Project

Worked on PathVisio, an open source pathway analysis software, to develop a portable library from its core to read and write GPML files, added additional modules for exporting to other widely used formats BioPAX, SIF and a network model for the pathway to ease graph computations with thorough unit testing and documentation

May 2016 - July 2016

### Samsung Research Institute, Bangalore

#### Summer Intern

Understanding Language Model and different modelling techniques, Language Model simulation with open source, modifying Open Source LM according to confidential project

May 2017 - July 2017

### Pricewaterhousecoopers Pvt Ltd, Kolkata

#### Summer Intern

Analyzing open source datasets using SQL semantics, writing clustering algorithms with PL-SQL and detect outliers, build a recommendation system using nearest neighbours approach

## Projects

July 2016 - December 2016

### Rendezvous Pass Distribution System

Developed a platform for distributing over 10,000 passes in an hour window, handled heavy spike traffic with queue system redirecting from high bandwidth server to internal servers using stateless tokens for authorization

December 2016 - May 2017

### BRCAflow

Event management app for BRCA for administration of events, club budget and purchase requests among other things with proper authorisation All events logged later used in the verification of students CV points

December 2015 - May 2016

### Jabberwocky

Used Samsung Remote Sensor SDK to develop a game for multiple devices, slave devices act as controllers (used gyroscope sensors) to control the real time multiplayer game running on the master device relying on the underlying UDP services for low latency

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## Education

2014 – Present **Undergraduate**  
Computer Science and Engineering  
Expected May 2018, GPA 8.366/10  
Indian Institute of Technology Delhi

## Awards

2014 **Joint Entrance Exam**  
All India Rank 313, 1.5 million applicants  
2016 **Appathon, Samsung R&D**  
won among over various teams from campus  
2012 **Kishore Vigyan Protsahan Yojana**  
Ranked 141 among 65000 applicants  
2014 **IITD Semester Merit Award**  
Top 7% SGPA first semester

## Technical Skills

Over 50k lines Java, C++, PHP, SQL, SML  
Over 10k lines Python, Javascript, C, Android  
Familiar CSS, Matlab, R

## Courses

Data Mining, Logic in CS, Cloud Computing, Machine Learning, Artificial Intelligence, Computer Networks, Operating Systems, Parallel Programming

## Bachelor Thesis

### Poverty mapping using satellite data

July 2017 - Present, Prof Aaditeshwar Seth

Use LANDSAT images to classify features related to development using Google Earth Engine, establish correlation between found features and state's census data, map poverty for different time periods and analyze the time series data

## Position of Responsibility

### Web Coordinator, Rendezvous

- Created and managed Rendezvous 2016 website, immensely focused on the frontend
- RESTful APIs for the android app, maintained the backend with LAMP stack