

# Divyanshu Saxena

INDIAN INSTITUTE OF TECHNOLOGY, DELHI  
0882-608-0933 | dssaxena2011@gmail.com

## EDUCATION AND ACADEMIC DETAILS

Degree/Exam	Institution	CGPA/%age	Year
B.Tech, Computer Science & Engineering	Indian Institute of Technology, Delhi	8.382	2020 (Exp.)
ISC	City Montessori School, Lucknow	96.50%	2016
ICSE	City Montessori School, Lucknow	96.80%	2014

## PROJECTS

### Person Counter and Display Device - DISA

[Prof. Subodh Kumar, May 2017-Present]

- This project was developed as a part of the **Design Innovation Summer Award (DISA)**.
- Used OpenCV and Python to process images taken in a room to count the number of people in the specified range.
- Implemented on-site real-time processing using Beaglebone. Results can either be displayed or sent via mail to a pre-specified authority.

### Secure Access Logging with Vulnerability Analysis

[IoT Project, July 2017 – Present]

- Project ongoing under the mentorship of Samsung IoT Lab at IIT Delhi and shall be done in two modules.
- First module is to develop a logging system in Iotivity to log every access to all the resources present, the resources under scan would be system defined resources and user defined resources.
- The second module of the system is rule based vulnerability analysis module.

### Maze solving Line following Robot

[Winter Project in Robotics Club, Nov 2016 - Dec 2016]

- Developed a line following robot using Arduino, IR sensors, etc.
- Modified Dijkstra's algorithm for solving mazes by traversing through it first and then processing it.
- Participated in Techfest, IIT Bombay in the maze solving competition.

### Road Accidents Data Portal

[Jun 2017 – Aug 2017]

- Developed a portal to get easy access to road crashes data in India and present it in an interactive manner.
- This portal was launched by the **Ministry of Road Transport and Highways (MoRTH), India**.

### Study Portal

[Apr 2017 – Aug 2017]

- Developed a crowd-contributed web portal, using Django framework, for study purposes for the students of IIT Delhi.

## RELEVANT COURSES

**Computer Science:** Introduction to Computer Science, Data structures\*, Digital Logic and System Design\*, Discrete Mathematical Structures\*, Special Module on Internet of Things\*

**Mathematics:** Linear Algebra, Calculus, Probability and Stochastic Processes\*

\*Courses currently pursuing

## SCHOLASTIC ACHIEVEMENTS

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- **JEE (Advanced):** Secured All India Rank 64 for admission to IITs among a total of 1.5 million students.
- **Kishore Vaigyanik Protsahan Yojana (KVPY):** Achieved All India Rank 61 in KVPY organised by IISc, Bangalore and Department of Science and Technology, Government of India; was awarded a fellowship for the same.
- **National Standard Examination in Physics (NSEP):** Qualified NSEP twice in 2014-15 and 2015-16, being in top 1% in the country.
- **National Standard Examination in Chemistry (NSEC):** Qualified NSEC the year 2015-16, being in the top 1% in the country.
- **National Talent Search Examination (NTSE):** Selected as NTSE scholar in 2012, conducted by NCERT.

## TECHNICAL SKILLS

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**Advanced:** Java, Python, HTML, CSS, JQuery, Git, Arduino, Xilinx ISE, Vivado

**Intermediate:** Android, OpenCV, PHP, AngularJS, Django, Bootstrap, Autodesk Inventor, Linux, Iotivity, VHDL

**Basic:** C++, NodeJS, Shell, Visual Studio

## EXTRA-CURRICULAR ACTIVITIES

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- **Indian Road Safety Campaign:**
  - As a member of the Technical Arm of IRSC, worked on a road accidents data portal which was later launched by the Ministry of Road Transport and Highways (MoRTH)
  - Supervised a Technical Internship of two IIT Delhi students with DIMTS (Delhi Integrated Multi-modal Transit System Ltd.)
  - Worked on Technical collaborations with various companies in the field of road safety.
- **An Initiative for National Advancement (AINA):** Member of AINA, which is a club aimed at grooming students so that they realise their duty as a part of the society.
- **Robotics Club, IIT Delhi:** Member from November 2016 to February 2017
- **Software Development Club, IIT Delhi:**
  - Member from February 2017 to present
  - Developed a crowd-contributed study portal for the use of IIT Delhi students
  - Actively participated in promoting applied computer science culture in the college
- **Inter-Hostel Dance Team:** Participated in Group Dance Event, in January 2017 and Duo+ Dance Competition, held in September 2017
- **Best Fresher for 2016-17**

## POSITIONS OF RESPONSIBILITY

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- **Secretary, Web Team, Indian Road Safety Campaign** (Sept 2017 - Present)
- **Student Partner at Microsoft Student Partnership (MSP) Program** (Aug 2017 - Present): Selected to represent Microsoft at IIT Delhi
- **Executive, Technical Arm, Indian Road Safety Campaign** (Jan 2017 – Aug 2017)
- **Web Executive, Alumni Affairs and International Program, IIT Delhi** (Jun 2017 - Present)
- **Team Head, Creative (Design and Decorations) Team, Tryst 2017** (Jan 2017 - Feb 2017): Actively participated in the creative team of Tryst, 2017 - the technical fest of IIT Delhi
- **Web Executive, Student Mentorship Program (SMP), IIT Delhi** (May 2017 - Present)