

# Dhruv Agarwal

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## EDUCATION

### ASHOKA UNIVERSITY

B.Sc. (H), COMPUTER SCIENCE

May 2019 | Sonapat, India

Dean's List (All Semesters)

Major CGPA: 3.98 / 4.0

Cumu. GPA: 3.79 / 4.0

### MT. ST. MARY'S SCHOOL

May 2016 | New Delhi, India

Best of 4: 95.75%

## SKILLS

### PROGRAMMING

Proficient:

Python • C++ • JavaScript •  
PHP • CSS • HTML

Familiar:

C • Assembly •  $\text{\LaTeX}$

Database Management:

MySQL • MongoDB

Others:

Git • Bash • Flask • Node.js

### DESIGNING

Proficient:

Adobe Photoshop

## COURSEWORK

### UNDERGRADUATE

Discrete Mathematics

Probability & Statistics

Computer Organization & Systems

Advanced Programming

Operating Systems

Algorithms Design & Analysis

Data Visualization

Introduction to Machine Learning

Computer Networks

## LINKS

Github:// [agdhruv](#)

LinkedIn:// [agdhruv](#)

## EXPERIENCE

### AMPERSAND DESIGN | DEVELOPMENT INTERN

July 2017 – August 2017 | Gurgaon, India

- Developed industry standard interaction heavy web pages for the State Bank of India Card (SBI Card) [website](#) using HTML, CSS and JavaScript.

### FREELANCER | DESIGNER AND DEVELOPER

June 2015 – Present | Gurgaon, India

- Developed the chatbot interface for the SBI Card [homepage](#) using HTML, CSS and JavaScript.
- Developed web applications for startups, initiatives and festivals using PHP, core WordPress and front-end technologies.
- Collected and mined data using API calls and scraping techniques.

## PROJECTS

### ASHOKA MENU AND SHUTTLE BOT Mar '17

- As IT Minister in the elected Student Government, developed a Messenger Bot to inform users about the mess menu for the day, timings of the shuttle service, etc.
- Over 800 unique users and 190k messages sent and received.
- Awarded "Creative and Entrepreneurial Initiatives" award by the Vice Chancellor.
- Tech stack – Python (+ Flask), MongoDB and Facebook APIs.

### ENERGY MONITORING SYSTEM Aug '17 - Dec '17

- Developed a prototype to inform the occupants of a room about their real-time energy wastage, and allow comparison with their past statistics in monetary terms.
- Tech stack – Arduino (C++), Raspberry Pi, Python (+ Flask), MySQL

### PRISON ESCAPES IN INDIA—VISUALISATION Feb '18

- Used the National Crime Records Bureau (NCRB) data to find the causation of prison escapes in India. Documented [here](#).
- Used geovisualization tools and JavaScript based visualization techniques.

### VAHN: VEHICLE ACCIDENT HAZARD NOTIFIER Aug '18

- Developed a real-time Smart City system for automatic detection and reporting of road accidents, using a machine learning and vision algorithm, for reduced relief response time and avoiding chaining of accidents.
- Adjudged 5th best project out of 400 teams pan-India at Hack-IIITD.

### SIGNATURE VERIFICATION/FRAUD DETECTION Nov '18

- Trained a convolutional neural network to detect forgeries in signatures to detect fraud in virtually any human-oriented setting.

## TEAM EXPERIENCE

- |           |  |
|-----------|--|
| 2016      | Head of Tech team for inaugural inter-varsity cultural fest      |
| 2017      | Founder and organizer of the inaugural inter-varsity sports fest |
| 2018      | Fest Secretary of the sports fest (headed 70 member team)        |
| 2018      | Started "Project Muskaan" to teach computers to village kids     |
| 2016-2018 | Represented University in Badminton, Lawn Tennis, and Football   |