

# Shubham Sharma

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## EDUCATION

### VELLORE INSTITUTE OF TECHNOLOGY, CHENNAI

B.TECH. IN COMPUTER SCIENCE

Expected May 2020 | Chennai, India

CGPA: 9.21 / 10.0

### SUNRISE (ENG. MED.) SCHOOL

Grad. May 2016 | Kolkata, India

96.5% - class rank 1

## LINKS

Github:// [shubham1172](#)

LinkedIn:// [shubham1172](#)

Quora:// [Shubham-Sharma-522](#)

## COURSEWORK

### UNDERGRADUATE

Data Structures and Algorithms

Image Processing

Software Engineering

Operating Systems

Computer Architecture

Microprocessor and Interfacing

Parallel and Distributed Computing

High Performance Computing

Computer Networks

Digital Forensics

Cyber Security

Web Mining

### MOOCS

Machine Learning

Neural Networks and Deep Learning

Android Basics

Firebase with Android

Intro to DevOps

Scalable microservices with Kubernetes

Configuring Linux Web Servers

Introduction to Modern Application

Development

## SKILLS

Python • Java • Javascript

x86 • C • C++ • PHP

MySQL • Postgres • MongoDB

Flask • Django • NodeJS • Git

Android • LaTeX • DevOps

Linux • Embedded Systems • IoT

Software Architectural Patterns

## EXPERIENCE

### PRODUCT DEVELOPMENT INTERN | HASURA

May 2017 -- Aug 2017 | Bangalore, India

- Back-end developer - Wrote and tested code using Express.
- Built and shipped Shelf - A book selling platform for colleges.
- Prototyped, built, tested and released in iterations.

## PUBLICATIONS

- [1] **S. Sharma**, A. Negi, and P. J, "Gini index and entropy based evaluation: A retrospective study and proposal of evaluation method for image segmentation.," (Ranchi, INDIA), NCCS, 2018, 2018. [preprint].
- [2] **S. Sharma**, A. Negi, S. Singh, D. Sathia Raj, Samuel, G. Jasmine, V. Vijayakumar, and S. Ganesan, "Eye state detection for use in advanced driver assistance systems.," (Chennai, INDIA), ICRTAC-CPS, 2018, 2018. [preprint].

## VOLUNTEERING

### AI TRAINER | VIThink, Vellore Institute of Technology

Sep 2018 -- Ongoing | Chennai, India

- Training undergraduates in Machine Learning.
- Hold workshops and sessions to facilitate learning.

### TEACHING ASSISTANT | Vellore Institute of Technology

Aug 2018 -- Dec 2018 | Chennai, India

- Supervised and assisted students in problem solving.
- Assisted the professor with the course and held sessions for teaching.
- Conducted programming classes in Python and C.

## PROJECTS

### DRIVER DROWSINESS DETECTION | [code]

- The application runs on a raspberry pi which is mounted on the inside of a car's windscreen and raises alarm if driver gets drowsy.
- Live video stream from the camera is fed to the algorithm which uses Viola Jones and Convolutional Neural Networks to do the magic.

### PIED PIPER | HOME AUTOMATION SYSTEM [code]

- A voice-controlled, cloud based solution for home automation, made in 24 hours at a Makeathon which we won.
- Can control simple appliances like a tubelight as well as infrared controlled appliances like an AC with easy to mount modules.
- Natural language processing to understand speech and an Android app to control remotely.

### ANTON | DATABASE MANAGEMENT TOOL IN FLASK [code]

- Light weight web app to visualize and manipulate data on local or remote postgres database. Also provides a REST API for developers who want to use database without writing SQL query.
- Supports migrating databases from one server to another.

Other projects are available on my GitHub.