

# Avinash Madhukar

<https://chshbh.github.io>  
[madhukar.avinash14@stu.upes.ac.in](mailto:madhukar.avinash14@stu.upes.ac.in) | 875.558.6645

## EDUCATION

### UNDERGRADUATE

#### UPES

#### B.TECH IN COMPUTER SCIENCE

Expected May 2018 | Dehradun, India

School of Computer Science

Semester (7)

Cum. GPA: 2.74 / 4.0

### SCHOOL

#### MODERN INTERNATIONAL SCHOOL

Grad. May 2013 | Delhi, India

Percentage: 72.4

## LINKS

Github:// [chshbh](#)

Codechef:// [chshbh](#)

Hackerrank:// [chshbh](#)

Codeforces:// [chshbh](#)

## COURSEWORK

### MOOCS

MITx 6.00.1x, edX

MITOpenCourseWare 6.006, Fall 2011

### UNDERGRADUATE

Mathematics for Computer Science

Data Structures

Design and Analysis of Algorithms

Operating System

Computer System Architecture

OOPS Programming

Theory of Computation

Introduction to Open Source

## SKILLS

### PROGRAMMING

Basic:

• C/C++ • Java • Rust

Intermediate:

• Python2/3

### TOOLS AND PACKAGES

• git • make • cProfile

### DEVELOPMENT ENVIRONMENT

• Sublime Text 3 • nano • Code::Blocks •

Netbeans

## INTERN

### IDENTIFICATION OF TERRESTRIAL GLOBAL BIODIVERSITY

#### HOTSPOTS | IIRS, ISRO

Predicting new biodiversity hotspots hypothetically using the data generated by remote sensing and GIS.

- Using multi-criteria-based analysis and spatial decision support system to get a better estimate of the spatial and temporal changes in hotspots in real time.
- By using WorldClim data and world topographical data with species distribution model to prepare a workable uniform approach in determining the hotspots.

## PROJECT

### YATE, YET ANOTHER TEXT EDITOR | Aug 2016 - Nov 2016

A lightweight "GUI-like" text editor using Python, that automatically generates ciphertext, message digest and Base64 text files.

- Created a primitive text editor using ncurses(Python) library.
- Cryptographic Algorithms : AES128 Encryption, SHA256 Hashing and Base64 Encoding.

### PASSWORD MANAGER

A personal password manager.

- SqlCipher Database is used to encrypt the database file with AES.
- peewee ORM is used to map and interact with the database.
- Create, store, edit and generate password, that allows user to use a single "master" password to generate unique password for all the sites and services.

## RESPONSIBILITY

### CLASS REPRESENTATIVE | Nov 2015 - PRESENT

UPES,

Gather views from peers regarding various aspects of their course and to communicate those to members of staff.

### SENIOR MEMBER | SEPT 2016 - PRESENT

Programming Group,

Conducting classes and organizing discussion panel on Programming and Open Source.

## ACHIEVEMENTS

2016	3413/58520	Google Code Jam, Qualification Round
2016	2476/13388	Codechef Snackdown, Qualification Round
2016	596/9077	Codechef Snackdown, Elimination Round
2017	1248/21048	Codechef Snackdown, Qualification Round
2016	15th	Master the Mainframe, IBM
2017	Cleared	Facebook HackerCup, Qualification Round
2016	Participated	dgplug Summer Training