## Aarsh Verdhan

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### **OBJECTIVE**

To obtain an internship that will help me to explore new horizons in the field of computer science.

#### **EDUCATION**

Degree	College	University	Passing Year	Pass
	/School			Percentage
BTech.	Delhi	Delhi	2021	8.2 (Till Sem
	Technological	Technological		III)
	University	University		·
HSC	Sahoday Sr.	CBSE	2017	94.0
	Sec. School			
SSC	Sahoday Sr.	CBSE	2015	9.8 CGPA
	Sec. School			

#### **PROJECTS**

#### 1. Pollinator Bee EYRC-2018

- Implemented various control algorithms such as PID using ROS (Python).
- -Implemented various Object detection algorithms using OpenCV (Python).

### 2. Autonomous Underwater Vehicle

Worked on the software part of the Autonomous Underwater Vehicles "ARYA 1.0" and "VARUNA 2.0"  $\,$ 

- Implemented various object localization algorithms using OpenCV (C++) and Deep Learning.
- -Developed the control stack for the communication of rosnodes using ROS(C++).

#### 3. 3D Reconstruction of Stereo images

Developed a system to generate 3D coordinates of a point from stereo images.

- -Implemented a camera callibrator to get the camera matrix.
- -Implemented the algorithms of pose estimation and depth mapping.
- -Built using OpenCV in python.

#### 4. Wallpaper Changer to Spotlight Images (Windows)

Developed a software to change windows wallpaper to spotlight images.

- -Implemented file handling.
- -Implemented the OS library of pyhton.
- -Built using python.

### 5. Using Mobile Phone to collect IMU and Camera data

Developed a software to obtain IMU and Camera feeds from a phone using Roslibjs.

- -Built using javascript.
- 6. Created a chrome extension to manipulate Youtube
  Developed a chrome extension to manipulate youtube eg. skipping ads faster.
  -Built using javascript.
- 7. Developed an Android app "Anonytter" as anonymous twitter Developed an android app to post anonymous tweets.

  -Built using java and XML.
- 8. Developed an Image Classifier using MNIST dataset implementation done using Keras.
  -Built using Python.
- 9. Built DTU-AUV website
  - -Built using Express and MongoDB
- 10. Manipulated TurtleSim movement with input signs
  - -Built using ROS
- 11. Sudoku Solver from image
  - -Built using OpenCV and trained MNIST dataset

## RESEARCH AND PUBLICATIONS

# TRAINING AND INTERNSHIPS

- "Machine Learning" course by Coding Ninjas
- "Competitive programming" course by Coding Ninjas
- "intro to Nodejs" course by Udacity

## TECHNICAL SKILLS

- (a) Programming Langauges & Scripts
  -Python, Nodejs, JavaScript, C/C++
- (b) Algorithms & Data Structures
- (c) Frameworks & Libraries-Tensorflow, Opency, Keras, matploitlib, Pandas, Express, ROS (Robot Operating System)
- (d) Web Technologies -ExpressJs ,HTML5, CSS3
- (e) Databases
  -MongoDB,MySQL

#### SOFT SKILLS

- (a) Fast Decision Making
- (b) Perseverance
- (c) Patience
- (d) Taking Responsibilities and Leadership role

## **EXTRA CURRICULAR ACTIVITIES**

- Secured top 68 ranks in CBSE writing series, 2015
- Secured 3rd rank at DTC writing series, 2015
- Participated at SAUVC-2017, Singapore
- Participated at NIOT-2018, Chennai
- Participated at IEEE Extreme, 2018

### $\mathbf{CO}$

## CURRICULAR **ACTIVITIES**

- Participated in various interschool speech and debate competitions
- Participated in various quiz competitions

## PERSONAL

Father's Name: Anand Verdhan INFORMATION Mother's Name: Rita Kumari

Sex: Male

Date of Birth: 22nd November 1998

Nationality: Indian

Maritial Status: Unmarried

**DECLARATION** I here by declare that the above information is true and best of my knowledge

DATE : 17th April 2019