AARSH VERDHAN

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https://github.com/aarsh2211

EDUCATION

Name of course	Year	School/College	%	Dept. Rank
B.tech (till sem 5)	2019	Delhi Technological University	8.32	41
AISSCE (Class XII)	2015	Sahoday Sr. Sec. School, New Delhi	94%	4
AISSE (Class X)	2017	Sahoday Sr. Sec. School, New Delhi	9.8	2

ACADEMIC PROJECTS

- **AUTONOMOUS UNDERWATER VEHICLE**
  Worked on the software section of AUVs (ARYA 1.0 and VARUNA 2.0)
  Implemented various object localization algorithms using OpenCV (C++) and Deep Learning
  Developed a control stack for the communication of RosNodes, using ROS (C++)
  Worked on various microcontrollers such as Arduino UNO and Arduino Mega
  Worked with various sensors such as LED-R, AHRS (Attitude and Heading Reference System)
- **POLLINATOR BEE e-YRC, 2018**
  Worked on a project that mimics the behaviour of the pollinator bees under e-YRC (e-Yantra Robotics Competition)
  Got hands on experience with Pluto drones
  Implemented various PID and control algorithms using ROS (python)
  Implemented various Image Processing Algorithms using OpenCV (python)
- **SUDOKU SOLVER USING IMAGES**
  Built a Sudoku Solver to solve sudoku problems by taking input as the sudoku image and giving output as the answer
  Used a small neural net to train the MNIST dataset
  Used various OpenCV (python) functions
- **"ANNONYTTER" ANDROID APP**
  Co-Developed an android application ANNONYTTER as a medium to post anonymous tweet as an idea to combine Twitter and Reddit for a competition at IIT-ROORKEE
  Used XML and JAVA to work on the project
  Used Firebase Backend
- **3D IMAGE RECONSTRUCTION AND 6D POSE ESTIMATION**
  Worked on a small project "Autonomous Underwater Welding" and managed the software part using 3D image reconstruction and 6D pose estimation to find out the orientation and position of an object underwater
- **CHROME EXTENSION FOR YOUTUBE**
  Created a chrome extension for simple YouTube functions like ad-skipping and downloading content

TECHNICAL SKILLS

- **Programming Languages and scripts**
  - C++, C, Python, JavaScript
- **Frameworks and Libraries**
  - TensorFlow, OpenCV, ROS (Robot Operating System)
- **Web Technologies**
  - HTML5, CSS3
- **Databases**
  - SQL
- **Other Skills**

     o   Algorithms and Data Structures

ACADEMIC ACHIEVEMENTS AND AWARDS

- Awarded award for excellence in academics by Sahoday Sn. Sec. School, year 2011
- Awarded for various inter and intra school speech and debate competitions

POSITIONS OF RESPONSIBILITY

- DTU-AUV PR team
- Software Lead DTU-AUV

EXTRA-CURRICULAR ACTIVITIES AND ACHIEVEMENTS

- Secured Top 68 ranks in CBSE All India writing competition, 2014
- Secured 3rd rank in DTC Writing Competition, 2014
- Participated at SAUVC, Singapore 2017
- Participated at NIOT, Chennai, 2018
- Participated at IEEE Extreme 2017

PERSONAL INFORMATION

- Father's Name - Anand Verdhan
- Mother's Name – Rita Kumari
- Date of Birth – 22 November 1998
- Nationality - Indian

DECLARATION

I hereby declare that the details furnished above are true and correct to the best of my knowledge and belief.