Amegh Bhavsar

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B-405, LBS Hall of Residence, IIT Kharagpur, W.B., India - 721302

Education

INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Dual Degree in Biotechnology and Biochemical Engineering | Sophomore
Expected April 2020 | Kharagpur, India
CGPA: 7.51/10.00

VIDYASAGAR SCHOOL

All India Senior School Certificate Examination
Grad. May 2015 | Indore, India
Percentage: 88.0%

Links

Github:// ameghbhavsar
Linkedin:// ameghbhavsar

Courses Undertaken

Programming and Data Structures
Partial Differential Equations
Probability and Statistics
Introduction to Programming with MATLAB *
Robotics: Computational and Motion Planning*
Intro to Computer Vision *
The Arduino Platform and C programming*
* indicates online courses

Skills & Expertise

PROGRAMMING LANGUAGES
C, C++, MATLAB, Python, C#, MySQL, HTML, CSS

TOOLS & LIBRARIES
OpenCV, Git, Sockets

SOFTWARES
Adobe Photoshop, Atmel Studio, Adobe Illustrator

HARDWARES
Arduino, ATmega

Extra-curricular Activities

- Leader of Awareness Group under NSS IIT Kharagpur. Organized various awareness campaigns, street plays and surveys.
- Keen interest in graphic designing and video making
- Badminton at hobby level
- Paper craft as favorite pastime

Projects

SWARM ROBOTICS, IIT KHARAGPUR | Software Team Member

Mar 2016 - Present | Kharagpur, India
Guide: Prof. Somesh Kumar, Prof. Pallab Dasgupta

- Worked on designing networking architecture for Swarm Robots in C
- Accomplished localization of robots using AprilTags library in C++
- Implementing path planning algorithms for robots to travel freely in an arena avoiding obstacles and other robots
- Designing Leader selection and Clustering algorithms for swarm model
- Developing a software architecture which can implement swarm model on any type of terrestrial or aerial robot

FOOTFALL COMPUTATUION USING OpenCV | Project Member

Dec 2016 | Kharagpur, India

- Attended IEEE certified workshop on Image Processing
- Understood inside out of color channels, filtering, edge detection, object detection and tracking, and feature extraction techniques like Hough transform
- Accomplished IEEE certified project of computing number of people in a room using OpenCV in C++

MOTION MIMICKING & PATH REPLICATING ROBOT | Project Member

Dec 2016 | Kharagpur, India

- Attended IEEE certified workshop on autonomous robotics
- Became familiar design and mechanism of different types of robots
- Gathered understanding about working and use of various integrated circuits, sensors, and actuators
- Learnt concepts of microcontroller programming and applied them on ATmega 16 using Atmel Studio
- Accomplished IEEE certified project aimed at making an autonomous robot which could imitate the path of another robot on ATmega and Arduino

Positions of Responsibility

GOPALI YOUTH WELFARE SOCIETY | Senior Executive Member

(Gopali Youth Welfare Society (GYWS) is a registered NGO run by students of IIT Kharagpur which provides free education to underprivileged children)

Design Team Member

Aug 2015 - Present | Kharagpur, India.

- Responsible for all designs related to social media accounts and the website

Media and Publicity Team Member

Jan 2016 - Present | Kharagpur, India

- Handling social media accounts., contacting renowned newspapers and for coverage and responsible for making all the reports related to the organization.

Other Responsibilities

- Working for financial support of students from poor background under the initiative 'Educate a Child' under Professors Relation Team.
- Part of the team that raised a remarkable amount of Rs. 2.5 Lakh in Jan,2016 and Rs. 2.2 Lakh in Jan,2017 for the free school run by GYWS