

AMEGH BHAVSAR

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EDUCATION

Indian Institute of Technology, Kharagpur <i>B.Tech + M.Tech in Biotechnology and Biochemical Engineering</i>	July 2015 - Present Kharagpur, India
Vidyasar School <i>All India Senior School Certificate Examination</i>	Grad. May 2015 Indore, India

TECHNICAL SKILLS

• Languages	Proficient: C, C++, Python Intermediate: MATLAB, HTML, CSS
• Tools & Libraries	OpenCV, Git, ROS, Gazebo
• Software	Adobe Photoshop, Atmel Studio
• Hardware	Arduino, ATmega, Raspberry Pi

RELEVANT COURSEWORK

Programming and Data Structures	Partial Differential Equations
Probability and Statistics	Basic Electronics
Robotics: Computational Motion Planning*	Introduction to Computer Vision*

* indicates online courses

RESEARCH EXPERIENCE

Swarm Robotics IIT Kharagpur <i>Software Team Member</i> Guide: Prof. Somesh Kumar , Prof. Pallab Dasgupta	March 2016 - Present
• Developed a ROS package for path planning of mobile robots using Artificial Potential Field Link	
• Tested and optimized the APF algorithm on a simulator to overcome the problem of local minima Link	
• Worked on developing an ad-hoc network for communication of swarm robots using sockets in C.	

PROJECTS

2D Image Stitching

- Implemented stitching of multiple images to generate a panoramic view by calculating **homographic transform** using **RANSAC** in **OpenCV** | [Link](#)

IEEE Image Processing Workshop

- Developed an application to count number of people entering the room using **HaarCascades** in OpenCV and a simple paint application as the problem statement | [Link](#)

POSITIONS OF RESPONSIBILITY

Gopali Youth Welfare Society <i>Overall Coordinator</i> (GYWS is a registered NGO run by students of IIT Kharagpur providing free of cost education to underprivileged children)	May 2017 - Present
• Led a team of 80 members to run a free school and expand GYWS throughout India.	
• Raised sponsorship of Rs. 2.2 Lakh in Jan, 2017 within the campus for the free school run by GYWS.	
• Improved recognition of GYWS in social media by an increase in page likes by 2,500 within a month.	

ACHIEVEMENTS

Ranked under top 6% applicants in Joint Entrance Examination 2015.