

Shreyas Sachan

PERSONAL DATA

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CAREER OBJECTIVE

To pursue RD opportunities, and solve real world problems. To be associated with an organisation which provides me an atmosphere to augment my technical and inter-personal skills.

WORK EXPERIENCE

SUMMER 2017	Summer Reasearch Intern at CLUSTER INNOVATION CENTRE, UNIVERSITY OF DELHI, <i>New Delhi</i> <ul style="list-style-type: none">• Made a flight controller using Arduino ATmega328.• Studied the Kinematics & Dynamics of quadcopter.• Detected Aruco marker using Pi camera and sent back the data to Arduino.
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EDUCATION

CURRENT	B.Tech in INFORMATION TECHNOLOGY & MATHEMATICAL INNOVATION Cluster Innovation Centre, University of Delhi Minor: Electronics & Embedded System CGPA: 8.1/10.0
MAR 2016	AISSE (All India Senior School Certificate Examination), CBSE Kendriya Vidyalaya Old Cantt. Allahabad PERCENTAGE: 92.8/100.0
MAR 2014	AISSE (All India Senior School Certificate Examination), CBSE Kendriya Vidyalaya Old Cantt. Allahabad CGPA: 10.0/10.0

SCHOLARSHIPS AND CERTIFICATES

APRIL 2017	Awarded as the 'Best Algorithm' in e-YIC (e-Yantra Ideas Competition) 2017 for the project 'Visual Perception for Visually Impaired' held at IIT BOMBAY.
OCT 2017	First Runner-Up in an online coding competition organised by HackerEarth under CONVOKE (TechFest of CIC).
Nov 2015	Youth Exchange Programme by Government of Japan - 120 Students from INDIA.

TECHNICAL SKILLS & INTERESTS

General Programming:	PYTHON, MATLAB, JAVA, C, C++
Databases:	SQL
Data Analytics:	R PROGRAMMING, PYTHON
Interests:	DATA SCIENCE, MACHINE LEARNING, NATURAL LANGUAGE PROCESSING,

PROJECTS

• VISUAL PERCEPTION FOR VISUALLY IMPAIRED	Used RGBD Kinect camera and RaspberryPi to process 3D images in ROS (Robot Operating System) using PCL(Point Cloud Library). This was used to cluster the point clouds into different objects whose features are then calculated and this information is then relayed to an indigenously developed Android application which then used Google text-to-speech APIs to speak out a message mentioning the location and features of all objects found in that frame.
• VEHICULAR AD-HOC NETWORKS IN INDIA	The aim of the project was to simulate a VANET (Vehicular Ad-Hoc Network) Architecture using various routing protocols (i.e. DSR, DSDV & AODV) and hence find the best routing protocol (among these three) in Indian scenario. The performance of these protocols were analyzed and compared with respect to average throughput, end to end delay, packet loss and packet delivery ratio during communication by varying the vehicular traffic in the area. Simulation was done in SUMO (Simulation of Urban Mobility) & NS (Network Simulator) 2.34.
• HAND WRITTEN DIGIT RECOGNIZER USING NEURAL NETS	MNIST dataset was used to collect the hand written data and the digits were predicted using Sklearn's MPL Classifier.
• ROBOATTACK: A BROWSER BASED GAME	Created a game which runs on a browser using JavaScript and HTML. The game describes a problem in which you have to destroy edges in a random graph such that no two nodes containing the robots have a path between them and the sum of weight of deleted edges is minimum. Used delaunay's triangulation algorithm to create random graphs in which no two edges are intersecting. Implemented an algorithm which could solve the above problem in an efficient way.

LANGUAGES

HINDI:	Fluent
ENGLISH:	Fluent
JAPANESE:	Basic Knowledge

POSITION OF RESPONSIBILITY

CRIP	<i>Organizer , Apr 2018 - July 2018</i> CIC Robotics Internship Program(CRIP) is an initiative by the Robotics Society of the institute to enable budding roboticists to work on practical projects under the mentor ship of experienced students/ faculty/ industry persons in the field of Robotics.
AUTONOMI	<i>Human Resource Manager , Apr 2017 - Mar 2018</i> Autonomi is the Robotics society of the institute.
CONVOKE 2.0	<i>Organizer , Oct 2017</i> CONVOKE is the official Tech Fest of the institute. Organized the Robotics event successfully.
AUTONOMI	<i>Social Media Manager , Jan 2017 - Apr 2017</i> Autonomi is the Robotics society of the institute.

INTERESTS AND ACTIVITIES

INTERESTS:	Internet Surfing, Sudoku
ACTIVITIES:	Badminton, Chess, Mobile games, Swimming, Trekking, Travelling