

Siddhartha Saxena

2nd year Computer Science and Engineering Undergraduate Student

Phone: +91 7054124184
Email sidsax@iitk.ac.in Hall 2 B213

Education

IIT Kanpur B.Tech. Computer Science and Engineering 9.6/10
Vijayverghiya Bal Vidyalaya, Kota AISSSE (CBSE), 93.8%
Delhi Public School, Rewari AISSE (CBSE), 10/10

Projects

AUV-IITK (Autonomous Underwater Vehicle) Software Subsystems under Prof. K.S Venkatesh and Prof Sachin Y Shinde
December 2015 - Present | **Code**
Creating a vehicle to complete a set of tasks without any human intervention.
Detection and computing the distance of a Buoy from the bot using OpenCV libraries.
Detection of a gate and its orientation with respect to the bot.
Integrated it with ROS framework to form the backbone of software subsystem.

Machine Learning Reading Project under Prof. Piyush Rai
June 2016 - July 2016
Stochastic Neighbour Embeddings to summarize the data.^[1]
Projecting the data in a hamming space for efficient data storage.^[2]
Probabilistic Archetypal analysis to find the latent archetypes in the data.^{[3][4][5]}

Introduction To Machine Learning ACA Project
February 2016 - April 2016 | **Code**
Applied NLP to make a spam classifier and classifying movie reviews dataset part of NLTK corpus as positive or negative using Naive Bayes.
Applying Principal Component Analysis using eigenvalues of a dataset of several images of a given person for Facial Recognition in Matlab.
Did Handwriting Recognition on MNIST dataset using sigmoid neurons, back-propagation, cross entropy and quadratic cost function using Numpy.

Extra-Curricular Activities

Secretary, Robotics Club
Prepared a voice recognition Bot for SnT day 2016
Presented AUV-IITK in exhibition in Techkriti 2015, the annual Technical fest of IIT Kanpur
Took part in various robotics events like IRGT in Techkriti 2015, Robotricks in Takneek 2015

Core Team Member, VOX POPULI Journalism body of IIT Kanpur
Instant reporting on news related to campus e.g. opening of Dominoes
Wrote articles for the Fresher's Print Edition 2016 and Winter Print Edition
Conducted a Survey about the Coaching Institutes of Kota in Campus

Awards and Fellowships

Secured AIR 190 in JEE Advanced 2015 out of 150k students who qualified through JEE Mains
Secured AIR 777 in JEE Mains 2015 out of 1.5 million students
Received KVPY fellowship 2015
Received Merit Certificate in Mathematics for being in top .1% students all over the country in class XII examinations

Languages and Skills

English and Hindi
OpenCV, C++, L^AT_EX, Python, Numpy, Matlab, Octave, Microsoft Office, HTML/CSS,

Relevant Courses

Introduction To Computing	* Ongoing
Abstract Algebra	Introduction To Machine Learning Techniques*
Complex Numbers	Linear Algebra
Introduction to Psychology	Partial Differential Equations*
	Introduction to Logic*