Sushovan Mandal

Bachelor of Technology Student,
Computer Science and Engineering,
Indian Institute of Technology Kharagpur

Roll No. : 10CS10048
Contact no. : +91-9800397328
Email : mandal.sushovan92@gmail.com, sushovan.mandal@cse.iitkgp.ernet.in

LinkedIn : in.linkedin.com/in/sushovanmandal, **Github**: github.com/enlighter

Academic Record

Year	Course / Examination	Institute	Cumulative Grade Point Average / Percentage
2010 – Present	4-year B.Tech, Computer Science and Engineering	Indian Institute of Technology, Kharagpur	6.7 out of 10 (till last semester)
2010	Class 10 + 2, All India Senior School Certificate Examination	D.A.V. Model School, Durgapur	89%
2008	Class 10, All India Senior School Examination	D.A.V. Public School, Midnapore	88.4%

Technical Skills

- ❖ Programming Languages known : Python, C, C++, Java, SQL, HTML, CSS
- ❖ Softwares : compilers & interpreters(**gcc/g++, python, linux shell/bash**), version control(**git, github**), Integrated Development Environments(*Netbeans , Eclipse, Microsoft Visual Studio,* **IntelliJ IDEA & derivatives**, AVR Studio 5 (*programming Atmega microprocessors & various sensors*), advanced editors (**Sublime, Atom**) Processing IDE [http://processing.org/]), Microsoft & other Open Source Office Suite
- ❖ Experience of working with linux / unix based OS : Archlinux, Ubuntu and others
- ❖ Experience of working with different Open-source libraries like *OpenCV, ROS, python* & *perl* libraries

Projects & relevant experience

- ❖ Worked on several relevant academic projects:
  - Built a prototype of a Online Course System website using Django and MariaDB
  - Used Hadoop and MapReduce to extract statistics about user behaviour from an online discussion forum data
  - Used C++ 11 for Computer Graphics Projects.
- ❖ Interned at SAP Labs India, Bangalore
  - Worked in the Test Automation Department
  - Developed prototype Android based application alongwith a partner
  - Worked on a new 3rd party integration protorype for Windows Environment (C#)
- ❖ Worked for Autonomous Ground Vehicle, IIT Kharagpur (http://agvkgp.com/) which worked on various inter-disciplinary research & development projects in the field of Robotics & Artificial Intelligence, with a long-term goal of developing India's first self-driving car
  - Implemented ultrasonic sensor module with Atmega16 microprocessor (AVR programming) and UART (Universal Asynchronous Receiver / Transmitter) based

serial communication to the main computer, where the perception of the
environment of the robot from the sensor data was done using a VC++ program
in Visual Studio 2010 for path-planning and obstacle-avoidance. This module was
used in a robot named Eklavya 1.0, the team's entry to IGVC 2012 (Intelligent
Ground Vehicle Competition) held in Michigan, USA
- Worked on implementation of socket programming and Gazebo 3D environment
simulator in Eklavya 2.0 (for participating in IGVC 2013) and Lunar Autonomous
Rover prototype for Team Indus (Indian entrant to Google Lunar X space
competition)

❖ Designed and developed Java based interactive and informative visualizations of
various concepts of Physics for e-learning purposes for a start-up
http://thelearningpoint.net/. These are applets using Processing libraries and
environment (http://processing.org/).

❖ Worked in a 2 member team to build an online Business Simulation Game portal for
Intaglio'12, the annual Business school summit hosted by Indian Institute of
Management Calcutta, using HTML, CSS and PHP.

❖ Worked in a 3 member team winning 'Best Freshers' Award' in an Image Processing
based 'Robotix' event 'Robocop' at the Techno-management Fest of IIT Kharagpur,
Kshitij 2011. Image Processing was done using OpenCV libraries in a VC++ project in
Visual Studio 2008 in a laptop, serially connected (UART) to an Atmega32
microprocessor controlling a motor-driver circuit implementing a differential drive.

❖ Attended a workshop on Image Processing organised by Technology Robotics Society (
http://www.robotix.in/) during December 2010 and solved the problem statement of
Shape Detection and Shape Following by a robot, as a team, using OpenCV libraries
integrated with a Visual Studio 2008 Project.

❖ Built a GUI based calculator and a Very Large Integer Multiplicator in C++ for
Computer Science project in class 12, without using any kind of *graphics libraries.*

Extra-Curricular Activities

❖ Volunteered at NSS at the capacity of Deputy Group Leader
- Lead a team of volunteers in the renovation work of a village school
- Awarded for being one of the best volunteers

❖ Active in IIT Kharagpur's Inter Hall Activities such as :
- Technical events: Opensoft, Product Design, Hardware Modelling, Ad
Design
- Social & Cultural events: Choreography, Hindi/Bengali Dramatics

❖ Outdoor group activities like road trips, mountain trekking

❖ Volunteered in Shaurya'10, IIT Kharagpur's Sports Fest

Declaration of Authenticity

I hereby declare that the information furnished above is true to the best of my
knowledge and belief.

Place: IIT Kharagpur   Sushovan Mandal
Date: March, 2016   Roll No. : 10CS10048
                                                                           B.Tech CSE
                                                                           IIT Kharagpur