I have completed my Bachelor's degree in Electronics & Instrumentation Engineering from **West Bengal University of Technology**, India on August 2012. The following year I was a Programmer Analyst and Web developer in **Cognizant Technology Solution**, a US Multinational and leading software firm. Following are the details about my academics, subject of interests and others.

### **ACADEMICS**

- Primary School Rahara Ramakrishna Mission Boys Home Aggregate – 81.625 % (653 out of 800)
  Majors – Mathematics - 92 out of 100, Physics - 90 out 100
- High School Northland High School Aggregate – 76.4 % (382 out of 500)
  Majors – Mathematics - 96 out of 100 (A+)
- Graduation West Bengal University of Technology Grade Point Average – 7.67 out of 10

# **Professional Appointment**

2013 – 2014 Programmer Analyst and Web Developer at Cognizant Technology Solution

# **Technical Skills**

**Programming Languages:** 

Experience - C , Microsoft Visual C++ , Java (Object Oriented & Advanced)

Others - Python, MATLAB

**IDEs:** Experience – Eclipse Others – Pycharm, Sublime Text

Database: Experience - MySql, Oracle

Web Design: Experience – HTML, CSS, JavaScript, JQuery, Bootstrap

3D Graphics Toolkit: Blender, Unity

Miscellaneous: OpenCV, Pygame, Tkinter, Photoshop

#### Area of Interest:

Robotics - Sensors and Transducers, SLAM, Swarm Robot, Designing

Artificial Intelligence - Machine learning, Image recognition, Kalman Filter, Particle Filter

Other - Networking, Algorithm Efficiency, Game Design

<sup>\*\*</sup> Those Under "Experience" is part of my Projects and Training at Cognizant and have significant work-experience

# **Past and Ongoing Projects:**

#### AUTONOMOUS GRABBER ROBOT WITH OBSTRUCTION DETECTION AND PATH FINDING CAPABILITY

Under guidance of Prof. Nabanita DasGupta. and with fellow students Debajit De, Subhra Kamal Sengupta, Arnab Sarkar

<u>Objective</u> – The goal of our project was to develop a fully automatic system, which will be able to grab object and transport it from its start location to end location through complex path.

The main challenge was to navigate through mazes all by itself, by having a knowledge of the maze or by solving the maze 1<sup>st</sup> time with much amount of time, and other major challenge was to differentiate between a moveable object and a wall.

### o 29 - A CARD GAME WITH APPLICATION OF PROBABILISTIC MODELLING

A self funded project in collaboration with Dibyendu Das (Tufts University, PhD Candidate)

Objective – The aim of this project is to create 29 (a card game very popular in eastern Asia <u>Linki</u>).and played with 4 player, and the challenge is to make the Computer Player recognize the human players playing attribute (bluffing, aggression, defense) and respond to it accordingly.

Currently it is on beta stage.

## Hands-on Experience

### PC to Microcontroller Interfacing with LCD

In Ardent Computech Private Ltd. Here I was instructed and informed about the various aspect of Microcontroller and Embedded System. And in my hands on I made an interfacing system using 8051 microcontroller with pc.

#### Project Based Training on PLC

in Electronics Regional Test Laboratory. During the course I was conveyed instruction and hands on experience on PLC technology. I created a Tank Water Level control programming using SCADA and Siemens S7-300

### **Publications:**

### **Conference Attended:**

- 1) Attended a 2 Days ACEEE International Conference on "Recent Trends in Communication and Computer Networks 2013" (ComNet 2013), held at Hyderabad on 8-9th November and presented a research paper on "Autonomous Grabber Robot with Obstruction Detection and Path Finding Capability".
  - -- Debajit De, Dipayan Das, Subhra Kamal Sengupta, Arnab Sarkar ELSEVIER 2013 Proceedings Of ComNet, CIIT and ITC, ISBN No.: 978-81-910691-6-3, Page No.: 115-124, Paper ID: ComNet2013-60RE

### Journal Papers:

- Autonomous Grabber Robot with Obstruction Detection And Path Finding Capability
  - -- [Book Advances in Engineering and Technology Series, ISSN No.: 2214-0344, Volume No.: 7, Page No.: 115-124]