

# Soofiyan Atar

soofiyan.a@somaiya.edu | +918425932900

## EDUCATION

**K.J. SOMAIYA COLLEGE OF ENGINEERING**

**BTECH IN ELECTRONICS AND TELECOMMUNICATION**

Expected May 2020 | Mumbai, India | CGPA:8.17/10

**SWAMI VIVEKANAND JUNIOR COLLEGE - H.S.C.**

Percentage - 86% | March 2016 | Mumbai, India

**SWAMI VIVEKANAND HIGH SCHOOL - S.S.C.**

Percentage - 88.6% | April 2014 | Mumbai, India

## LINKS

Github: [github.com/Soofiyan](https://github.com/Soofiyan)

LinkedIn: [linkedin.com/in/soofiyan-atar-93227a131](https://www.linkedin.com/in/soofiyan-atar-93227a131)

## ONLINE COURSES

- **Coursera**-Machine Learning on MATLAB
- **Coursera**-Deep learning using Python programming language
- **Coursera**-Robotics: Aerial Robotics by University of Pennsylvania
- **Coursera**-Algorithmic Toolbox by University of California San Diego
- **edX**-Autonomous Mobile Robot course by ETH Zurich university
- **Udemy**-Mastering Microcontroller with Embedded Driver Development
- **Udacity**-Computer vision
- **Udacity**-Computational photography
- **Udacity**-Artificial intelligence for Robotics

## SKILLS

### COMPUTER SKILLS

- C • Embedded C • Matlab • MySQL
- Python • C++ • CSS • Javascript
- HTML • ROS • OpenCV • Git
- Tensorflow • Keras

### EMBEDDED SKILLS

- Arduino • AVR MCU • ARM MCU
- Raspberry pi • Quectel MC60 MCU

### OTHER TECHNICAL SKILLS

- Machine learning • Deep learning
- Perception • Control systems
- Mobile Robotics • Aerial Robotics

## AWARDS

- |      |                      |  |
|------|----------------------|--|
| 2019 | AIR 5                | ABU Robocon national level competition(amongst 130 teams) held by IIT Delhi                |
| 2019 | 3 <sup>rd</sup> rank | E-yantra competition(amongst 12,681 students) held by IIT Bombay                           |
| 2018 | AIR 30               | ABU Robocon national level competition(amongst 120 teams) held by MIT Pune                 |
| 2018 | 1 <sup>st</sup> rank | Find-a-way fade away competition held in Abhiyantriki(K.J. Somaiya college of engineering) |

## DECLARATION

- I declare that all the details in this document are true and a valid proof of the same will be made available if required

## EXPERIENCE

### TEAM KJSCE ROBOCON | FIRMWARE ENGINEER TEAM MEMBER

June 2017 – June 2019

- ABU Robocon is an international Asia Pacific competition and I participated at national level competition twice. In both the years we were given different challenges and I was the firmware coder in the team.

### FACLOX LABS | FIRMWARE ENGINEERING INTERN

May 2019 – July 2019 | Mumbai, India

- Worked on the Quectel MC60 microcontroller to send data over MQTT protocol on the arrival of specific messages on the controller.
- Worked on PT100 temperature sensor and posted the data from mc60 microcontroller using TCP protocol.
- Worked on the E-Riksha charging station where the data was displayed on LCD and received data from the servers using TCP protocol.

### E-YANTRA COMPETITION | BAGGED 3RD RANK ALL OVER INDIA

Sept 2018 - March 2019 | IIT Bombay

- 3rd rank holder amongst 12,681 students in the theme nutty squirrel where A\* algorithm was implemented along with line following algorithm using PID feedback controller.

### ATOS | DATA ANALYST ENGINEERING INTERN

July 2019 – August 2019 | Mumbai, India

- Wind turbine blades having various defects were detected using a drone and using deep learning techniques faster RCNN.

### IN-HOUSE E-YANTRA INTERNSHIP | FIRMWARE ENGINEERING INTERN

July 2018 – August 2018 | K.J. Somaiya College of Engineering

- I2C protocol implemented for IMU on AVR microcontroller and also implemented on the firebird bot.

### VIRTUAL LABS | 5 DAY WORKSHOP FOR THE DEVELOPMENT OF VIRTUAL LABS

Jan 2019 | Aurangabad, India

- Virtual labs, 5 day workshop was held by IIT Bombay at MIT College of Engineering, Aurangabad. In this workshop I implemented a lab which was hosted on the virtual labs website.

## RESEARCH

### IEEE 5TH INTERNATIONAL CONFERENCE FOR CONVERGENCE IN

### TECHNOLOGY, 2019 | PHOTO TRANSISTOR ARRAY WITH SPI COMMUNICATION FOR ROBOT SENSING

March 2019 | Pune, India

## PROJECTS

- **4 legged quadruped robot** - 4 legged robot with pneumatic actuators for the locomotion which makes 2D locomotion with very less computation expensive.
- **Autonomous 3 wheeled robot** - Autonomous robot which traverses a specific path autonomously using drive encoders and Inertial Measurement Unit(IMU) also used SIFT for location matching.
- **Manual 4 wheeled robot** - Manual robot with 4 wheel holonomic drive system which was controlled by a PS2 controller and many more functions were also controlled by the ps2 for a particular task.
- **Cervical trainer** - This device was used to do head and neck exercises particularly for physiotherapists and using wifi we can also train the user remotely.
- **Smart shoes** - Shoes which can act as a pedometer and also had self lacing capabilities with reverse charging function.
- **Hand sign numbers recognition for gesture controlled bot** - Hand signs were trained using neural network and using numbers we gave the direction for the bot.