Raj Kumar Bhagat

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Objective :

Currently a second year undergrad at NIT Trichy, I aspire to be a successful Research and Development Engineer with sufficient technical and social skills to contribute in the development of our nation.

Education :

Degree	School/University	Passing Year	Percentage/CGPA
B.Tech	NIT Tiruchirappalli, Tamil Nadu	2021	CGPA : 8.41(till now)
Higher Secondary Education (CBSE)	JVM Shyamali, Ranchi, Jharkhand	2017	91%
Secondary Education (CBSE)	DAV Public School, Gumla, Jharkhand	2015	CGPA : 10

Projects :

1. ### Mocking Bot   eYRC-2018, IIT Bombay
   Audio Processing, Embedded System, Sensor Interfacing.   **Nov 2018-Mar 2019**

   To a given audio file apply audio processing. Extract the notes, onset, instrument from the audio. Communicate the information to the bot which will imitate the same music on piano and trumpet made for the same.
   GitHub Link - link
   YouTube Link - link

2. ## Portable Braille   **Sangam'18, Pragyan, NIT Trichy**

Embedded Systems, Image Processing, Circuit Design.   **Dec 2018 - Mar 2019**

This project is an approach to solve the problem of unavailability of many of the books and texts in Braille scripts. In short, it is an assistive reading technology: Portable Braille, a system which is able to translate the captured image of a printed material into Braille code and reproduce them in the braille terminal.

GitHub Link - link

YouTube Link - link

3. ## Wireless Gesture Controlled Game Controller

Embedded Systems, IR Communication, Sensor Interfacing.   **Aug 2018-Sept 2018**

A wireless gesture recognition setup which is used in place of keyboard to play various games. This setup includes IR Communication (NEC Protocol), microcontroller etc.

GitHub Link - link

Technical Skills :

- **Programming Language :** C, Embedded C, C++, Python, Arduino, LaTex.

- **Hardware :** AtMega Series (AVR Microcontrollers), Arduino, Raspberry pi.

- **Software Skills :** Sonic Visualizer, MATLAB.

Soft Skills :

1. Dedicated

2. Collaborative

3. Organization

Extra-Curricular Activities :

- Member (Embedded), at **SPIDER, R&D Club of NIT Trichy**.

- Organizer at **AAVEG'18**, first year inter-hostel fest of **NIT Trichy**.

- Workshop Coordinator at CURRENTS'19, **EEE Department Symposium, NIT Trichy**.

Co-Curricular Activities & Achievements :

1. Secured 1st place in **eYRC-2018** (Theme : Mocking Bot). A **MHRD** sponsored robotics competition conducted by **IIT Bombay**.

2. Selected in final round of the **Sangam** (technical exhibition) at **Pragyan 2019** with the project titled **Portable Braille**.

3. Secured 2nd place in SPIDER CRE-8, A hardware (embedded) based competition, at **NIT Trichy**.

4. Organized and conducted a four-day workshop on the Wireless Gesture Controlled Game Controller using IR communication, and AT mega328P based microcontroller for 250 students conducted by SPIDER (R&D club of NIT Trichy).

Personal Details :

Father's Name: Hira Lal Bhagat
Mother's Name: Sita Devi
Sex: Male
Date of Birth: 20th may 1999
Marital Status: Single

References :

Dr. Sishaj P Simon,	**Dr. Manoranjan Sahoo,**
Associate Professor,	**Assistant Professor,**,
Department of Electrical and Electronics Engineering,	Department of Electrical and Electronics Engineering,
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Declaration :

I hereby declare that above-mentioned information is correct to the best of my knowledge and belief.

Date :

17th april 2019