{ChetanChawla}

Electronics and Communication Engineering Student

Personal Details

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LinkedIn & Git

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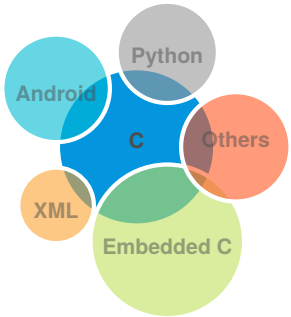
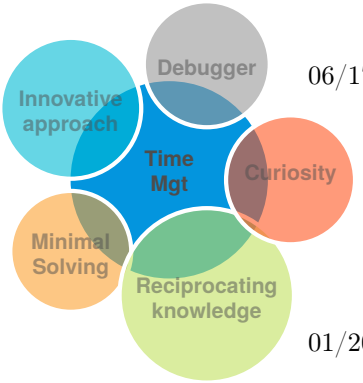
Programming



Skills



Career Objective

Having happiness and being content in what I do is the most important thing. I have a passion for astronomy, astrophysics as well as Space related technologies, thus I tend to set my ultimate goal as working in these fields, more specifically, **joining ISRO** and serving humanity.

Education

2015 - 2019 **B.Tech, Electronics and Communication Engineering** College
Bharati Vidyapeeth's College Of Engineering
9.034 CGPA upto 4th semester(on 10 grade)

2014 - 2015 **AISSCE- CBSE Board (XII) PCMB** School
Kendriya Vidyalaya Tagore Garden, New Delhi Aggregate percentage - 95.00%

2013 - 2014 **AISSE - CBSE (X)** School
Kendriya Vidyalaya Tagore Garden, New Delhi Aggregate percentage - 93.10%

Experience

08/17 - Now **Chairperson RAS (Robotics and Automation Society)** BVPIEEE
RAS (Robotics and Automation Society) is the student chapter of BVPIEEE which deals with various aspects of Robotics and Automation. It has delivered many series of workshops and set many benchmarks in BVCOE. One of the most trusted societies in the college, RAS has been mentored by great inspirations and is continuing their legacy.

08/17 - Now **Publicity Manager** BVPIEEE
The post is placed in the Auxiliary division of BVPIEEE Executive Committee. It involves taking charge of the event as well as fest publicity, both inside and outside BVCOE.

06/17 - 08/17 **Project Intern** IIT Delhi
Project Internship at IIT Delhi, IOT Labs, under Celestini Project India, by Marconi Society. The project was sponsored by Google. After clearing the phase-I, phase-II of the competition advances as an internship involving making a project to increase road safety on Indian Roads using Digital Image Processing on Raspberry Pi using computer vision/deep learning and Networking of cars, connecting them using cloud services and making Android applications to aid the process.

01/2016- Now **Cultural Representative** BVCOE NSS
NSS is the National Service Scheme which works as a voluntary organizations to help and act on various social issues prevailing the branches of the society

02/17 - 05/17 **Social Media Manager** REES 52 Ltd.
The responsibilities involved keeping active the Facebook page by making the post outreach skyrocket with least amount of resources spent

Platforms and Tools

Arduino IDE
Android Studio
Blender
Proteus
XCTU
Audacity
Libre Pilot
Orcad Capture
AVR Studio
Atmel Studio
Sony Vegas Pro 14.0
Adobe Photoshop CS6
Processing
MATLAB

Hardware

Raspberry Pi 3B
Arduino Boards
Firebird V
XBees 2.4C
CC3D
Texas Instruments
MSP-430
ATmega16 MCU

OS Preference

Windows ★★★★★
Ubuntu ★★★★★
MacOS ★★★☆☆

Languages

Hindi ★★★★★
English ★★★★☆

08/16 - 07/17 **RAS Student Representative** BVPIEEE
Being a student representative, my work revolved from being the technical assist to being the person who lets others know about the society. Under this role, I managed to get more than 80 people on board to attend various events organized by the society, help in managing those events and also helping in meeting the technical needs as required by any robotics society.

08/16 - 07/17 **Head of Public Relations** BVPIEEE-CS
Computer Soceity under BVPIEEE hosts IEEE Xtreme which is the central attraction for all the coders. Thus, my duties, apart from commuicating with people throughout the year, involved the widespread of the hackathon.

2016-2017 **Event Coordinator and Manager**
In several technical events like Robo Rugby, Robotic Guardians, Propeller Clock Designing, Alumni meet, Fervour- The annual BVPIEEE technical fest,etc.

Publications

Nakul Garg, Ishani Janveja, Chetan Chawla, Divyansh Malhotra, Harshil Bansal, Pulkit Gupta, Aakanksha Chowdhery, Prerna Garg, Brejesh Lall
Poster - Drizy: A Collaborative Driver Assistance System
Drizy:DRIve eaSY is a collaborative driver assistance system developed under Celestini Project India with the help of Marconi Society and IIT Delhi and sponsored by Google. It targets to reduce the huge amount of fatalities occuring every year in India due to its chaotic road scenario.
ACM Digital Library Publication

Honors, Awards & Certifications

11/2017 **1st position in Celestini Prize India**
The competition was held by Marconi Society in association with IIT Delhi and Google

10/2017 **1st Position Evotech, BVest**
Evotech was a project presentation competition held in BVCOE's annual tech fest

03/2017 **4th position in e-Yantra robotics competition 2016 (National Level), Theme: BV,CSE Dept., IIT Bombay**
Certificate : ee30ab8c264725f72867933b164f06031b2aa2f8

10/2017 **Participation in IEEE Xtreme 11.0 and 10.0**
Xtreme is an international competitive coding competition. The team had an AIR 41. The participation in its 10th edition in 2016 yielded the team an AIR of 80. My roles included debugging and algorithm development.

07/2016 **A-merite in Embedded Systems Training**
Cyborg Labs

04/2016 **Completion of Android for Beginners**
A course by Udacity in association with Google Developers Group

03/2016 **Positioned Second in RoboRace- Junkyard wars**
The competition was organized by ACM BVP as a part of their technical fest

05/2015 **Positioned in top 1.5% in XII in All India KVS**
Also received congratulatory letter by Ministry of Human Resource Department, India.

Projects

Ongoing **Perpetual Drones**
The project focusses on an impoertant power aspect in the field of Drones for various services. It tends to propose a perpetual power source for the drones to maintain the chain without any human intervention

Ongoing **Disaster management using modelling by Hexapods**
It makes use of the 3 degrees of motion hexapods can offer to do the work in disaster management

10/2017 **Creating a Indianized Pedestrian Dataset for comprehensive tracking computer vision algorithms using deep learning and machine learning approaches**
On going as a part of the mini project

08/2017 **Drizy : A Collaborative Driver Assistance System**
We built a prototype for real time alert generation for Vehicle-to-Pedestrian collision avoidance on Indian Roads and Vehicle-to-Vehicle collision avoidance on uncontrolled intersections having blind spots. The prototype was tested for accuracy and feasibility on IIT Delhi roads where the whole project was designed. It revolved around technologies and devices such as Raspberry pi, DIP, Machine Learning, Novel optimization techniques, Android development, Cloud connectivity and networking aspects.

03/2017 **Swarm Robotics and Interfacing of two Firebird Vs**
Firebird Vs are ATmega 2560 based robots provided by ERTS labs by IIT Bombay. Interfacing involved formation of data structures to traverse a complex arena using line following and playing notes while encountering obstacles and rerouting paths while serially communicating all the information to the other robot using ZigBee 2.4C Xbee communication.

12/2016 **Blender Game - Dangal**
The project involved multi staged environment coded in Blender Python and Blender Game engine for game development logics on the fundamental levels as well as 3D modelling to design the objects.

10/2016 **Propeller Clock Designing**
Propeller Clock uses a rotating shaft with mounted LEDs on it. The program was built on AVR studio and booted on an ATmega 8 microcontroller on the same chip. Different patterns, time, names and PacMan game were displayed using the concept of persistence of vision.

08/2016 **Infrared sensors based Invisible Piano**
The project was built around the idea that Infrared sensors can detect the presence or absence of our fingers, which could be used to actuate many things. The first thing coming to the mind was a piano. Project used different IR sensor for each finger. The OCR function creates different frequencies of sine waves used as inputs to a speaker, thus forming the essence of an invisible piano.

06/2016 **DTMF controlled home automation system**
The project incorporated the usage of Atmega 16 microcontroller/Arduino Mega, DTMF modules and Relays. DTMF provides an infinite range which makes it best to use in case of remoteness. The project works on different dialing tones of different numbers and thus a different response, used as home automation actuation.

03/2016 **Calculator application for Android**
It mimics the functionality of any normal calculator working on more than two numbers at a time and applying BODMAS rules

Extracurricular and Hobbies

Core volunteer and Cultural volunteer at BVCOE- NSS(National Service Scheme)

Pianist (PSR-E303 and PSR I425) and Back Vocalist in DhunsatV-The Band.

Anime and Science Fiction lover.

Artistic Skills and Graphics Designing.

References

1	**Mr. Abhishek Gagneja** Contact No. - +91 9971122557	Assistant Professor, BVCOE
2	**Shivam Bhardwaj** Contact No.- +91 8130844448	Pursuing MS, New York Univerity

November 14th, 2017 Chetan Chawla