



{Chetan Chawla}

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EDUCATION

BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING

B.Tech, Electronics and Communication Engineering
2015-2019 (anticipated) | New Delhi
Cum. CGPA: [9.034](#)

KENDRIYA VIDYALAYA TAGORE GARDEN

AISSCE, CBSE Board (XII) PCMB
Grad. 2015 | New Delhi, India
Percentage - [95%](#)

LINKS

LinkedIn:// chetan-chawla
Github:// chetanchawla

COURSEWORK

TRAINEE

IIT Delhi: 12/2017-01/2018

- Neural Networks (ANNs, CNNs & RNNs)
- Deep Learning
- Music Generation
- Image Processing & Computer Vision

TRAINEE

Cyborg labs: 06/2016-07/2016

- Embedded Systems
- Introduction to PCB design
- Robotics

COURSE

Udacity and GDG : 01/2016-03/2016

- Android for Beginners

SKILLS

GENERAL

Time Management • Debugging •
Innovative and Minimal Approach •
Curiosity • Reciprocating Knowledge

TECHNOLOGIES

Neural Networks and Deep Learning •
Robotics and Embedded Systems •
Serial Communication • Android app development • Signal Processing •
Digital Image Processing • Internet of Things • 3D Modelling

EXPERIENCE

RAS SB IEEE BVCOE | Chairperson

08/17 - Now | New Delhi

- Robotics and Automation Society curates workshops, events, exhibitions etc
- Mentoring 60+ students with the team

IIT DELHI | CELESTINI PROJECT INDIA | Project Intern

06/17 - 07/17 | IIT Delhi

- Selected in phase I of Celestini Project India
- 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

REES 52 LTD. | Social Media Marketing Intern

02/17 - 05/17 | New Delhi

- Managed the Facebook page
- Skyrocketed the outreach of the Robotics based company

RAS SB IEEE BVCOE | Student Representative

08/16 - 07/17 | New Delhi

- Technical assistance in the events and workshops
- Managerial and promoting work for the society

RESEARCH

POSTER - DRIZY: A COLLABORATIVE DRIVER ASSISTANCE SYSTEM N. Garg, I. Janveja, D. Malhotra, [C. Chawla](#), H. Bansal, P. Gupta, A. Chowdhery, P. Garg, B. Lall

Drizy:DRive eaSY is a collaborative driver assistance system for Indian roads. It has 2 modules- Vehicle-to-Vehicle and Vehicle-to-Pedestrian Collision avoidance. The paper has been accepted in ACM MobiCom 2017. ACM Digital Library Publication

IIT DELHI- DEEP LEARNING LABS | STUDENT RESEARCHER

01/2018 - Now | New Delhi

Working in the field of Advertisement Rhetoric Decoding using Deep Learning as part of the recent challenge floated by Adriana Kovashka (Univ. of Pittsburgh) in CVPR 2017.

AWARDS

PAUL BARAN YOUNG SCHOLARS CELESTINI PRIZE INDIA 11/2017

The team was awarded by Dr. Robert Tkach, Vice Chairman, Marconi Society along with Dr. Brejesh Lall, Head IIT Delhi and Dr. Aakanksha Chowdhery, Marconi Young Scholar

1ST POSITION EVOTECH, BVEST

10/2017

Evotech was a project presentation competition held in BVCOE's annual tech fest, Bvest

PROGRAMMING

Proficient

Python • C • Embedded C/Arduino • Blender • Android

Mediocre

MATLAB • VHDL • XML • TCL • Assembly • OpenCV(Library) • Tensorflow(Library) • Keras(library)

Familiar:

C++ • Java

HARDWARE

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

SOFTWARE

Arduino IDE • Android Studio • Blender • Proteus • XCTU • Wordpress • Audacity • Libre Pilot • Orcad Capture • AVR Studio • Atmel Studio • Sony Vegas Pro 14.0 • Adobe Photoshop CS6 • Processing • GNU Sim8085S • Mentor Graphics Pyxis • Mentor Graphics QuestaSim

LANGUAGES

- Hindi(Native Proficiency)
- English(C1 Proficiency)

ACTIVITIES

VOLUNTEERING

Core cultural volunteer at BVCOE-NSS(National Service Scheme)

EXTRA-CURRICULAR

Design and Event Manager at Aagaaz, The Music Society, BVCOE • Pianist (PSR-E303 and PSR I425) and Back Vocalist in DhunsatV-The Band • Graphics Designing volunteer

HOBBIES

Astronomy enthusiast • Anime fan (Otaku)- Steins;gate and Code Geass being the favourites • Musical Instruments- Piano (Highly Proficient) and Guitar (Intermediate) • FPS MMO Gaming- having more than 2500+ online experience • Sketching • Watching Science Fiction

4TH POSITION IN E-YANTRA ROBOTICS COMPETITION 2016

03/2017

Eyantra is a National level robotics challenge organized by CS Dept., IIT Bombay, which had Space Exploration themed tracks, out of which, BV was assigned to our team. We competed with 160 teams.

POSITIONED IN TOP 1.5% IN XII STANDARD IN ALL INDIA KVS

05/2015

Received congratulatory letter by Ministry of Human Resource Dept., India

PROJECTS

MUSIC GENERATION USING DEEP LEARNING

01/2018

Used Recurrent Neural Networks (SRNs, LSTMs and GRUs). Developed as an experimental analysis of different techniques and achieved an accuracy of 99% on training dataset

[Link to Project](#)

PERPETUAL DRONES

Ongoing

Perpetual Drone with intelligent system designing for automatic power station chain of 24X7 worker drones.

INDIANIZED PEDESTRIAN DATASET

11/2017

Creating an Indianized Pedestrian Dataset for detection. Attained two times the test accuracy as compared to KITTI dataset (62%). The next step involves video annotation of 8 classes for tracking.

SWARM ROBOTICS AND INTERFACING OF TWO FIREBIRD VS

03/2017

Firebird Vs are ATmega 2560 based robots

Interfacing involved formation of data structures to traverse a complex arena using line following and striking notes using a mechanism while encountering obstacles and rerouting for shortest possible paths while serially communicating all the information to the other robot using ZigBee 2.4C Xbee communication

PLANET TERRAIN ANALYZING AND MODELLING

03/2017

Firebird V robot was used to traverse a grid arena representing a planetary surface.

Sensing the type and position of rocks and real time 3D modelling using wireless serial communication with Blender 3D modelling software.

INFRARED SENSORS BASED INVISIBLE PIANO

08/2016

Arduino interrupts were used

REFERENCES

1. ABHISHEK GAGNEJA

Assistant Professor, BVCOE

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2. DR. AAKANKSHA CHOWDHERY

Associate Research Scholar at Princeton University.

Email Address: achowdhery@alumni.stanford.edu