

Sahukari Chaitanya Varun

Bachelor of Technology (Honors) in Electrical Engineering Indian Institute Of Technology, Hyderabad +91-7095075634 ee19btech11040@iith.ac.in GitHub | Chaitanya Varun LinkedIn

EDUCATION

Degree	${\bf Institute/Board}$	CGPA/Percentage	Year
(Hons) Bachelor of Technology	Indian Institute of Technology, Hyderabad	9.33*	2019-2023
XII	Telangana State Board of Intermediate Education	98.2%	2019
X	Board of Secondary Education, Telangana	10	2017

EXPERIENCE

• Teaching Assistant

Aug 2022 - Dec 2022

Data Structures and Applications

IITH

- Tutoring the students taking the course ID2230

• Oracle
Project Intern

June 2022 - July 2022

- Working in the Fusion Analytics Warehouse (FAW) Team

– Detection of Susceptible Actions through analytical means.

Bengaluru

• JTG,IEEE IT SoC Summer School

June 2022

Student Attendee

IIT Mandi

- Attended lectures by renowned mathematicians on the advance topics of information theory

• IEEE, SP Cup

May 2022

Hyderabad

- Worked on speech spoof attribution methods. Presented our work in ICASSP 2022, Singapore.

World-wide first runner up.

- Worked on speech spoof

International

- The same work poster presented at Purdue Graduate Showcase event won the People's Choice Award

• DRDO, Advanced Systems Laboratory(ASL)

Dec 2021 - Jan 2022

Winter Intern

- Worked in the domain of Radar Signal Processing

• 5G Testbed - WiSig Networks

June 2021 - August 2021

Project Intern

Hyderabad

– Worked in the Physical Layer : IP Core design with Vivado HLS and Embedded programming

• Flipkart Grid-3 Hackathon

Present

Team Associate of Round-2 qualify team in the nation

Hyderabad

- Worked in domains of Image segmentation and processing, chassis design and hardware assembly

• Inter IIT - Engineers Conclave

2020

 $Part\ of\ IITH\ Contingent$

IIT Kharaghpur

- Presented Automated Sudoku Solver using CNN and backtracking algorithm.

PROJECTS

• BIPED Robot*

Working on the vision aspect of a BIPED Robot

• AI Living Lab for GPAI*

Working on creating a platform for collaboration amongst labs.

• 3D Image Registration for OCT volumes*

 $Implementing\ a\ tool\ for\ providing\ volume\ registration\ in\ collaboration\ with\ University\ of\ Pittsburgh$

• Path Navigation Setter

Implemented gyro-based path correction for straight moving bot

• Indo-Swiss Virtual Sustainability Challenge

Developed a proof of concept for the problem of sustainable fabrics industry with cross-country collaboration.

• Project Album

Worked on PhotoClassifcation using OpenCV and Deep Learning.

• SIR Pandemic simulation

Performed a Covid Simulation using Data Structures (Graphs, Queues) as a part of Academia

• Hardware Calculator

Built a hardware calculator using ATmega328P, avr-gcc, oscillators and other basic electric components as a part of academia

• Voice Controlled Car Bot

Built a Voice Controlled Car using feed-forward linear layer written from scratch using numpy and scipy as a part of academia.

Drone

 $Built\ a\ auto-pilot\ drone\ as\ a\ part\ of\ academia\ using\ Mission Planner$

• Finger Print based Security system

Developed it as a team for an independent project using arduino, servos and other basic electric components.

• Image Deblurring using Gyro-data

Implemented a GAN based architecture to deblur images using the IMU readings(gyroscope) of the capturing device.

TECHNICAL SKILLS

- Programming Languages: Python, C++,C,Matlab,Octave
- Micro-controllers handled: Arduino, Raspberry Pi
- Operating Systems worked on: Windows10, Linux(Ubuntu)
- Electronic Simulators worked with: LTSpice, NGSpice
- CAD Software worked with: KiCAD, Solid Edge

RELEVANT COURSES

- Communication Technologies and IoT: Digital Modulation Techniques, Communication Systems, Introduction to Drones, Internet of Things(IOT)
- ML and Computing: Introduction to Computing, Introduction to AI and ML, Introduction to Modern AI, Certified in Python, Intro to Machine Learning, Pandas, Data Visualisation, Intro to Deep Learning and Computer Vision in Kaggle
- Signal Processing and Information Theory: Matrix Analysis, Signals and Systems, DSP, Advanced DSP, Data Analytics, Random Processes, Information Sciences, Pattern Recognition and Machine Learning, DSP Lab, Introduction to Group Theory, Source Coding, Channel Coding, Convex Optimization, Concentration Inequalities, Intro to Sub-Modular Functions, Intro to Statistical Learning*, Topics in Signal Processing*
- Computer Science Courses: Introduction to Data Structures, Linear Optimization
- Control Theory: Network Theory and Synthesis, Control Systems, Certified in Matlab Onramp, Mathworks, Advance Control Theory*
- Digital Electronics: VLSI Design, Intro to HDL, Digital System Design, ADLD, Semiconductor fundamentals and electronic devices, Electric and Magnetic Circuits
- Analog Domain: Integrated Circuits for Wireless Communication, Analog Circuit, Analog lab, Analog Electronics

Positions of Responsibility

- SciTech, Coordinator (present mentor) for Elektronica(2021-22), Core in Robotix and Elektronika(2020-21)
- Cultural, Core of Irshaad-Stan Up Domain(2020-21)
- Elan nVision Fest, Sponsorship Coordinator (2020-21), Event Organizer of Elan-e-Jung (2019-20)

SCHOLASTIC ACHIEVEMENTS

• Awarded Academic Excellence Award on 14th Foundation Day of IITH,

2022

- Selected as a Project Intern at Oracle in Server Technology and was offered the full time role for the brilliant performance , 2022
- Pursuing Honors in Electrical Engineering,

2021

 \bullet Secured AIR 1702 in JEE Advanced ,

2019

• Two times AMTI round-2 qualifier,

2017,2016

PROFILE

- I am a person passionate about technology and interested in solving problems and challenges.
- I am a persistent learner of different things and a collaborative team player in diverse projects.

MISCELLANEOUS

- Part of Shufe Crew the dance club(2019-20),
- Part of Milan(Inter Hostel League)-2021 in dance, drama, and badminton team,
- Winner of SciTech General Championship in Milan(2022), Gold Medal in RC car racing, Bronze Medal in robosoccer,
- NSO Badminton.,