Basavesh K

S EDUCATION

Bachelor of Engineering in Electronics and Communication Engineering (ECE)

Global Academy of Technology, Bangalore, Karnataka *Nov 2022 – May 2026*

Pre-University Course (PUC)

Jain College, VV Puram

SKILLS SUMMARY

- **Programming Languages:** Python, C, C++
- Tools / Software: Excel, MATLAB, Xilinx
- Technologies / Platforms: Red Hat, Linux, Arduino, GitHub
- Soft Skills: Teamwork, Leadership, Communication

₽ PROJECTS

1. DreamDraw – Al Sketch to Art Generator (Apr 2025 – Ongoing)

- Developed a Python-based tool that transforms rough sketches into detailed digital artwork using deep learning.
- Integrated OpenCV for sketch detection and applied style-transfer models for artistic rendering.
- Designed for open-source release with real-time canvas input and preview UI.

2. Smart Traffic Light System using Arduino (Oct 2023 – Dec 2023)

- Built an intelligent traffic management system using Arduino and IR sensors.
- Adjusted signal timing based on vehicle detection and density.
- Simulated using Proteus and validated logic in Xilinx.

3. Radar System using Ultrasonic Sensor and Arduino (Sep 2023 – Oct 2023)

- Created a basic radar to detect obstacles using an ultrasonic sensor and servo motor.
- Visualized object distance and angle in real time using Processing IDE.
- Helpful in short-range object detection applications like robotics and parking systems.

INDUSTRIAL VISIT

Radio Astronomy Centre (RAC), Ooty (Feb 2024)

- Visited TIFR's premier facility for radio astronomical research.
- Observed the Ooty Radio Telescope (ORT) and learned about pulsars, neutron stars, and extragalactic phenomena.
- Gained insight into space weather monitoring and low-interference radio signal collection.

E CERTIFICATES

- Front-End Web Development TechConnect 3.1 (Nov 27–30, 2023)
- Basics of Python Wingspan (Jan 6, 2024)
- Internet of Things (IoT) Foundation Wingspan (Jan 9, 2024)