Harsh Shroff

Data Science Grad Student at University of Maryland, Baltimore County

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🖥 Online Resume

Experience

Electronics and Machine Learning Intern

WeHear Innovations PVT LTD, Jan 2022 – Jun 2022 (6 months)
- Worked with STM32F and STM32WB Dev board
- Worked on prototype implementation of hearing aids
- Worked on Speaker Recognition system
- Assisted in PCB Designing

Embedded Systems Engineer Intern

Episodic Labs, Feb 2021 - Aug 2021 (7 months)
- Worked on Raspberry Pi
- Worked on NRF52 development board
- Interfaced two cameras with RPi 3 and 4
- Assisted in PCB design of CM 4 IO board
- Assisted in research and development for several products

Education

University of Maryland, Baltimore County
Masters of Professional Studies in Data Science, 2022 – 2024

Vishwakarma Government Engineering College, Ahmedabad
Bachelor of Engineering in Electronics and Communication, 2019 – 2022
8.47 CGPA

Projects

- Mosquito Species Identification from its Wing Beats on a TinyML Device | Research Paper
  - **View Paper**: IEEE Explore
- Dr. Tongue | Ranked 4th at Ideathon 2021
  - Web application designed for tongue diagnosis, based on ML model trained using python and integrated with a website.
  - **View Project**: https://github.com/HarshShroff/Dr_Tongue

- WhatsApp Chat Analyzer
  - A web app designed in python with the help of Streamlit to analyse and visualise WhatsApp chats.
  - **View Project**: https://hs-wca.herokuapp.com/
- Object avoiding robot using Jetson Nano Dev Kit
  - It works on computer vision (CV) and machine learning (ML). The connected camera is always in ON mode and looks for objects and the ML model classifies it into "Obstacle" or "No obstacle" class in the real-time frames and the robot move accordingly.
- TABSAT | Research Internship at SSERD, Bangalore
  - Theoretical Design Approach of Distributed Femto-satellite system for forest fire monitoring.
  - **View Project**: https://teamfemoyer.sserd.org/
- IoT Based Notice Board | Diploma final semester project
  - Internet controlled and Raspberry Pi operated noticed board, which is currently implemented in the EC Department, Government Polytechnic Ahmedabad.

Achievements

- Winner at an international hackathon organized by the International Telecommunication Union (ITU) and The Telecommunications and Digital Government Regulatory Authority of United Arab Emirates (TDRA).
- Presented a talk on "Design of a Python-based Dashboard to Assist Athletes in Analyzing and Enhancing Their Performances" at SciPy India 2021, organized by FOSSEE and IIT Bombay. VIDEO
- Recipient of Young Author Recognition Award at Kaleidoscope 2021 conference organized by International Telecommunication Union (ITU).
- Published a research paper on "Identification of Deadliest Mosquitoes from its Wing Beats Sound Classification on Tiny Embedded System using Machine Learning and Edge Impulse Platform" at Kaleidoscope 2021 conference organized by International Telecommunication Union (ITU).
- One of the 13 finalists at "Dreams to Reality" contest organized by Sony Research India
- An article on one of my projects "Smart Dresser: an AI based Outfit Selector" has been published in a nationally renowned newspaper, Ahmedabad Mirror.

Skills

Embedded Systems	Machine Learning	Python Programming
R programming	Data Science	Artificial Intelligence
Web Design	Microcontrollers	Research
Arduino Programming	Edge Impulse	TinyML