linkedin.com/in/satxcho github.com/satxcho Hyderabad, Telangana

# Satvik Choulapally

Junior Year Undergraduate Student | D.O.B: 10 March 2004

T 1	1		. •		
Ed	116	ובי	F1.	റ	n
$\perp$		- (1		v	11

Year	Degree	Institute/School, City	Grade
2021 - Current	B. Tech, Computer Science & Artificial	Amrita Vishwa Vidyapeetham,	7.74 GPA
	Intelligence	Amritapuri	
2021	Class XII, Telangana State Board	FIITJEE Junior College, Hyderabad	96.6%
2019	Class X, CBSE	D.A.V Public School, Hyderabad	95.8%

# **Experience**

#### Research Intern @ AMMACHI Labs:

Oct 2023 - Jan 2024

- Researched on the impact of diverse teaching methods on students' performance, and analysed various trends and differences between 'good' and 'bad' teaching practices.
- Applied knowledge of tools used for video, audio and language processing/analysis like Rokoko suite and python libraries such as librosa and Moviepy.

## .NET Developer @ Traboda(Freelance):

Sep 2022 - Feb 2023

• Contributed to the development of a small-scale full stack application written in C#.NET framework for the purposes of testing, analysing and preventing various methods of cybersecurity attacks like SQL and CSV injection.

## P.O.R: Head @ Amrita Esports Community

**April 2023 - Current** 

## **Projects**

## CHIP8 Emulator | C++:

Dec 2023 - Feb 2024

• Implemented a COSMAC VIP CHIP8 emulator in C++, and Simple Direct-Media Layer (SDL) as a stepping-stone to the CPU emulation field.

## **Neural Network Implementation | Python:**

Aug 2023 - Sep 2023

- Developed a custom neural network model in Python by applying mathematical algorithms and trained it to be a handwriting recognition model on the MNIST dataset.
- Achieved 93% accuracy on a few epochs without using any inbuilt deep learning features/frameworks.

#### **OpenFlow Random Host Mutation in SDN:**

Sep 2023

• Developed a Moving Target Defence mechanism to prevent IP scanning from inside & outside the network. Controlled the packet flow in a SDN based on Random host mutation technique.

#### **Music Genre Recognition | Python/AI:**

**Jul 2023 – Aug 2023** 

• Implemented, trained and tested an ML model that is capable of recognizing the genre of a music sample from 10 different genres using Hidden Markov models

#### Skills

**Programming Languages:** Python (Proficient), C++ (Proficient), Java (Intermediate), C#.NET,

**Core:** Good grasp on concepts such as Linear Algebra, OS, Data Structures & Algorithms, IoT, Device Drivers, firmware and Embedded systems drivers, Computer Networking and UI Development.

Web Development: HTML/CSS (Proficient), JavaScript (Intermediate), React.Js, Node.Js, Express.Js

**Artificial Intelligence:** Core Machine Learning, Reinforcement Learning, Deep Learning, Computer Vision, TensorFlow, Pytorch.

**Soft Skills:** Fluent in English, Hindi, Telugu, Strong Communication and people skills, Confidence and Leadership, Eye for detail and perfectionism, Fast Learner and Adaptive.

#### Certifications

**Deep Learning Certification** – Nvidia: September 2023 **Foundational C# Developer** – Microsoft: October 2023