

# HRSH VENKET

ASHOKA UNIVERSITY – COMPUTER SCIENCE MAJOR

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## EDUCATION

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### BSc Computer Science second year student (Pursuing)

Ashoka University (2021–Present)

- Data Structures A; Probability and Statistics A; Intro to Machine Learning A

### A Levels

APL Global School, Chennai (2017–2021)

- AAAA (Physics, Mathematics, Economics, Classical Studies)

## TECHNICAL SKILLS

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**Programming Languages** Python3, C/C++,

**Tools:** L<sup>A</sup>T<sub>E</sub>X, Git, GDScript (Godot), Docker, Excel

**Languages:** Fluent in English. Conversational Fluency in Tamil, Hindi, and German

## EXPERIENCE

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### Mphasis Lab

Research Assistant

Ashoka University (August 10 2023 - Present)

- Remote sensing work with Professor Meghna Agarwal to build a forest fire classifier using LANDSAT time series data. currently working on training an LSTM
- Worked with Google Earth Engine Python API, and currently working on a literature review

### Intro to Machine Learning

Teaching Assistant

Ashoka University (Monsoon 2023 semester)

- Worked on Grading of Assignments and writing marking schemes for 80+ Students
- Took 25+ hours of Office Hours and worked on assessing 30+ Projects

### Ashoka University

Research Assistant

Ashoka University ((January 2023 - August 2023))

- I worked with a Phd Student from AP Lab (Bio) and Professor Raghavendra Singha (CS)
- Used OpenCV to measure measure intestinal deformations in microscopic roundworm C.elegans via 3D reconstruction

### IIT Madras

Game Design Internship

Chennai, India (Summer 2021)

- Helped build games to teach professional behaviour to students (in association with IIT CASH)

## PROJECTS

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Click [here](#) for more detailed writeups on my completed projects

### 3D Reconstruction using ML

Ashoka University (January 2024 - Present)

- Working on training a model to learning projective geometry for 3D reconstruction from 2 images, then training a model to estimate 3D shape from a single image.
- Learning to work with Xbox 360 Kinect Sensor and associates software to establish ground truth

### Load Forecasting Bounty

Ashoka University (January 2024 - Present)

- Working on [this Load Forecasting ML bounty](#) to do electricity loadforecasting using XGBoost or LSTMs
- Learning to deploy models using RDIP and weather APIs

### Basic Hawkeye System

Ashoka University (November 2023 - December 2023)

- Implemented a ball tracking and 3D reconstruction pipeline using YoloV8 and openCV with projective geometry

### MCTS in C

Ashoka University (November 2022 - December 2022)

- Implemented Monte Carlo Tree Search, a Reinforcement Learning algorithm, in C to play Mega Tic Tac Toe.

### The Merchant of Mareechikoor (Video Game)

Ashoka University (November 2023 - December 2023)

- Build a management (like Papers Please) style video game with the Godot Engine, implementing a drag and drop system, did basic 2D animations and interfaced with dialogue manager

## LEADERSHIP

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### **President of Eeshto (Board Gaming Society)**

Ashoka University, (February 2023 - January 2024)

- Managed a team of 50 across 6 departments
- Won award for outstanding contributions to campus life
- Expanded Eeshto into 3 verticals, introducing a Video Games team and wrote Club Charter, doubling the size of the club
- Oversaw 20 + campus events

### **School Pupil Leader (/Head Boy /School Captain)**

APL Global School, Chennai (2020 - 2021)

- Built a secure server for Primary school students to interact with each other outside of school hours, while allowing teachers to moderate discussion.
- Managed a team of 20 students from grades 6 to 12 who made up the student government

### **Secretary General**

APL Global School, Chennai (2020 - 2021)

- Organised the school's first fully student driven, first online MUN
- Oversaw 100 delegates over 3 committees
- Managed expenses and conducted the first profitable MUN of the school

## MISCELLANEOUS

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- Trained 4 years in Krav Maga
- 20 MUNs as Delegate, 5 MUNs in Organising Committee
- Member of College Volleyball A-team (Main Setter)