# Ark Malhotra

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in ark-malhotra

SqrtNegativOne

## Education \_\_

## B.Tech Netaji Subash University of Technology, CSE

Aug 2024 – June 2028

· CGPA: 8.6

## Experience \_

## ML Member, ML Department Mentor, Google Developer Student Club NSUT

Nov 2024 - present

- · Contributed to society projects such as makemore (character level text generator using PyTorch), AI factchecking, and the code for the Zero Day Apocalypse competition under the society's flagship event.
- · Managed recruitment for 600+ applicants in the ML department, selecting less than 20 after coding a dataset for the Kaggle competition witnessing participation from 200+ teams from 4 countries, and conducting interviews.

## ML Engineer, Team Debugging Society

Oct 2024 - present

· Organised and helped judge an inter-college data science competition with 50+ participants.

Content Writer and Research, Executive Committee Member, Axiom (The Philosophy Society)

Oct 2024 - present

· Managed recruitment for 145 applicants, selecting 30 members for the society after reviewing responses, conducting interviews, and coordinating with the team.

## Projects \_

## Backend for FloatChat: Conversational Interface for Oceanographic Data Visualisation

Sept 2025 - Oct 2025

SIH 2025 Project

- Collaborated with a 6-member team under a strict time limit to deliver a functional prototype for SIH 2025.
- · Selected as one of the top 90 teams from over 200 teams in the college.
- Implemented a FastAPI backend to connect a PydanticAI agent with data sources from multiple ARGO missions.

### **Modular AI Factchecking Pipeline**

June 2025 - July 2025

Python backend for an AI factchecking app.

· Implements a modular architecture for integration of web-scraping, NLP-based semantic search, and either LLMbased or NLI-based claim verification.

#### **Personal Website**

Oct 2024 - July 2025

Portfolio website and blog

- · Built using raw HTML CSS and Javascript, and Eleventy framework for blogging.
- · Implements responsive-design, a markdown engine, and an RSS feed.

## Hand Cricket Multi-Agent Bandit model

June 2025 - June 2025

Python backend for a Multi-armed-bandit using Experts-As-Arms to beat you at Hand cricket.

· Statically typed game-theory-inspired agent to win at the old game of Hand cricket by analyzing common patterns in user's moves.

### Skills

Languages: C++, C, C#, Javascript, Typescript, Python

Technologies: HTML, CSS, Svelte, Tailwind, PyTorch, Matplotlib, FastAPI, Git, LangChain, PydanticAI, Numpy, Pandas, Scikit-learn, Docker, Matplotlib

Core Concepts: Machine Learning, Artificial Intelligence, Backend, Object Oriented Programming