# Lala Arnav Vatsal

8809377988 | arnav.vatsal2213@gmail.com | Jaipur, Rajasthan

# Summary

Passionate second-year student pursuing B.Tech CSE. Experienced in developing various projects using different programming languages, frameworks, and tools. Proficient in competitive coding in C++. Strong interest in game development and artificial intelligence. Dedicated to learning new technologies and skills to grow my skills.

## Education

Manipal University Jaipur | Jaipur, Rajasthan B.Tech in Computer Science and Engineering | 07/2026 Achieved a CGPA of 9.71 in the 1st year.

Delhi Public School Ranchi | Ranchi, Jharkhand Higher Secondary School Certificate [CBSE] | 07/2022 Completed the course with a score of 89.8%

St. Thomas School Dhurwa | Ranchi, Jharkhand Secondary School Certificate [ICSE] | 07/2020 Completed the course with a score of 95.2%

#### Skills

Unity, Python, C#, C++, Artificial Intelligence, Machine Learning, Leadership, Teamwork

# Experience

# MUJ ACM SIGAI Student Chapter | Jaipur, Rajasthan Technical Head | 04/2023 - Present

Responsible for identifying and prioritizing technical goals for the chapter. Overseeing the implementation of cutting-edge programs and projects. Collaborating closely with the talented and dedicated members of the chapter, including the Executive Committee.

# Randomize MUJ | Jaipur, Rajasthan Event Coordinator | 01/2023 - 04/2023

Planning and organizing various events and activities, such as workshops, quizzes, etc. Marketing and promoting events and activities using various channels and strategies.

#### VRPlaying Games

# Game Developer | 09/2022 - 10/2022

I was responsible for converting pre-existing games written using Cocos2dx with C++ and Javascript to a Unity engine game using C#. Took complete ownership of the entire codebase and ensured that the games maintained their original functionality, performance, and quality. Implemented new features and enhancements using Unity's tools and frameworks.

#### DevTown (ShapeAI)

# Data Analyst Intem | 06/2021 - 08/2021

Took full ownership of the product life cycle. Understood customer needs through research and market data. Owned and shaped the backlog, roadmap, and vision of one cross-functional product team.

#### **Projects**

# Sightscope

It utilizes cutting-edge artificial intelligence (AI) technology to automatically generate descriptive captions for images. Through training an AI model on extensive datasets, we are able to extract visual features and generate meaningful descriptions that enhance visual accessibility. Additionally, the potential applications of this project extend beyond enhancing visual accessibility and can be utilized in areas such as surveillance and other relevant domains.

#### Rainfall Prediction using RandomForest

It is a rainfall data processing model using Random Forest Regression, an ensemble learning technique that harnesses the power of multiple decision trees. It is designed to provide forecasts on precipitation amounts for specific subdivisions within the Indian peninsula, for both monthly and yearly intervals.

#### Project Silver Valley

A sci-fi first-person shooter game with complex enemy AI, full-body character animation, and dynamic shooting mechanics. I used assets from Unity Asset Store to create a detailed game environment and incorporated APIs and SDKs for login and leaderboard functionality.

# Castle Siege

I designed a third-person multiplayer game with a real-time simulation of thousands of bots. I used advanced networking solutions to support seamless multiplayer interactions and implemented a robust system for managing player interactions and progress in an open-world environment.

#### Attendance Bot

I developed a bot for video conferencing softwares which used face recognition to mark attendance of the participants, using Python and OpenCV library.

# **Awards**

#### Runner up in Datathon

A data-focused hackathon which involved analyzing large sets of data and developing models or solutions to solve a specific problem or challenge.

# Semi-finalist in Toycathon

A national game-designing competition that challenges India's innovative minds to conceptualize novel toys and games based on Bharatiya civilization, history, culture, mythology, and ethos.

#### Silver Medalist in Majlish

An interstate sit-and-draw competition held on a specific theme. Aimed at promoting creativity and artistic skills among them.

#### Qualified Zonal Informatics Olympiad

Part of the Indian Computing Olympiad (ICO), it tests students' knowledge of computer science and programming.

# Community Service

# Fundraiser and Event Organizer

#### Youth Empowerment Foundation

Raised funds to distribute food packets and blankets to help the underprivileged community.

# Health counselor [HIV Project]

## Association of India for National Advancement

Provided HIV patients motivation and support to promote a healthy mental and physical state.