# **Dhruv Maniar**

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### **EDUCATION**

#### Texas Tech University, Lubbock, TX

December 2024

Bachelor of Science in Computer Science | Minor in Mathematics

GPA 3.33

Dean's Honor List | Presidential Merit Scholarship

#### **EXPERIENCE**

## **Marketing and Social Media Student Assistant**

February 2023 - May 2024

First-Generation Transition and Mentoring Program, Texas Tech University, Lubbock, TX

- Created digital marketing campaigns and engaging materials (graphics, videos, infographics) across platforms.
- Analyzed trends to optimize strategies, improving engagement and campaign effectiveness.

### **Guest Service Specialist**

May 2021 – June 2022

Texas Tech University Housing, Lubbock, TX

- Provided customer service at a 24-hour desk.
- Managed mail and packages following federal guidelines.

### **PROJECTS**

**Toby's Terror** 

August 2022 – December 2022

- Developed a 3D horror game using Unity, incorporating AI navigation via NavMesh and finite state machines.
- Developed immersive gameplay mechanics using C# for AI behavior and game interface communication.

AlgoWhiz

January 2024 – May 2024

- Directed a team to create an Al-powered educational platform using OpenAl, Python and Flask to analyze and teach complex algorithms to users.
- Utilized machine learning techniques to provide real-time feedback and detailed explanations.

### **Dual-Tone Multi-Frequency Encoder and Decoder**

August 2020 - December 2020

- Led a team to develop a DTMF decoder, analyzing sound signals to recognize keypad digit frequencies.
- Applied Fast Fourier Transform in Python, visualizing data from over 280 WAV sound samples with libraries like SciPy, NumPy, and Matplotlib.

Valorant Discord Bot September 2023

- Directed the development of a Python-based Discord bot, utilizing SQL for data management and YAML for configuration handling.
- Deployed on Google Cloud Platform, providing 24/7 access to over 18 million users globally.

#### **Shortest Path Finder**

August 2023 – December 2023

- Developed an algorithm in Python using Dijkstra's and Bellman-Ford to compute the shortest path between campus buildings.
- Modeled campus as a graph, optimizing travel routes by calculating distances between nodes (buildings).

#### SKILLS/ CERTIFICATIONS

- Technical Skills
  - Python | C | C++ | C# | Java | JavaScript | HTML | CSS | SQL | SQLite | MySQL | R
  - Google Cloud Platform (GCP) | Amazon Web Services (AWS) | Flask | Figma | Power BI | Bootstrap | Git/GitHub
- Certifications
  - Google UX/UI Design Certification
  - 100 Days of Python (Udemy)
  - Web Designing Certification (Livewire)

