# Hemanth Mukesh

hmukesh@outlook.com • (682) 597-7027 • Frisco, TX <u>https://hmukesh.me</u>

#### **EDUCATION**

## **Texas A&M University**

Aug 2021 - May 2025

BS in Computer Science with Honors

College Station, TX

- **GPA:** 3.98/4.0
- Relevant Coursework: DSA, Architecture, Programming Languages, Algorithms, Computer Systems, Software Engineering, Networks, Problem Solving

#### **SKILLS**

- Programming Languages: Python, C++, Java, Javascript, HTML, CSS, R
- Frameworks/Tools: React, Express, Node, Git, Agile, Amazon Web Services, Linux, Docker
- Soft Skills: Highly Adaptable, Dedicated, Team Player, Effective Communicator

# **PROJECTS**

# **C++ Network Applications - C++ | Visual Studio**

- Developed a suite of network programs in C++, leveraging memory manipulation and multithreading
- Created a web crawler capable of processing over 1 million URLs in just 2 minutes with 1000 threads
- Implemented robust error handling through fallback mechanisms, achieving 100% uptime with no crashes

## ChoreDash Python Game - Python

- Won 1st place overall in the 2023 Capsher Coding Competition
- Developed a 2-5 minute replayable **Python** game as a team of 3 using the pygame module
- Wrote over 50% of the code base, including scoring, timer, pause mechanics, and game state

#### **Personal Website -** React.js | Express.js | AWS

- Created a React website to showcase my coding projects to the world
- Integrated an AWS EC2 instance as the backend, hosting C++ applications on the cloud

## Mess Waffles Restaurant Website - PostgreSQL | Express.js | React.js | Node.js

Lead backend developer following Agile methodology - including sprints and scrum meetings

## RELEVANT EXPERIENCE

# **CSCE Undergraduate Researcher**

May 2024 - Present

Texas A&M University

College Station, TX

Starting research on coloring algorithms in GraphBLAS under Dr. Tim Davis at Texas A&M

# **CSCE Peer Teacher**

Aug 2023 - May 2024

Texas A&M University

College Station, TX

- Reinforced concepts to 150+ students total during Intro to Program Design (CSCE 121) lab
- Administered the official TAMU CSCE Discord an online community of 1,800+ users

## **Global Undergraduate Researcher**

May 2023 - Aug 2023

Texas A&M University and IIT Gandhinagar

Gujarat, India

- Analyzed over 20 recent papers in network telemetry, identifying key trends and advancements
- Prototyped a P4 switch through a Raspberry PI and demonstrated a **<5 percent** difference in P4 switch speed vs the industry standard, indicating potential for usage
- Collaborated cross-functionally with a diverse team and culture