

Anish Vallabhaneni (US Citizen)

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Education

University of Wisconsin - Madison | Madison, WI

Physics - Quantum Computing | 08/2026

M.S. - Physics - Quantum Computing

Georgia Institute of Technology | Atlanta, GA

Computer Science | 05/2025

B.S in Computer Science - GPA: 3.9/4.0 - Dean's List - Highest Honors

Notable Coursework: Machine Learning (A), Design and Analysis of Algorithms (A), Computational Modeling Algorithms (A), Neural Foundations of Machine Learning (A), Advanced Algorithms (A), Quantum Information and Computing (A), Automata and Complexity (A), Information Theory (A)

Experience

Quantum Engineering Research | Georgia Tech

Undergraduate Researcher | 08/2024 - Present

- Learned about and worked on implementation of Quantum State Preparation algorithms using tensors and optimization functions using **Qiskit**.

- Studied, analyzed, and compared methods of Quantum error mitigation, suppression, and correction found within **Qiskit**, in order to present to a team of **graduate researchers**.

Sulchek Labs | Georgia Tech

Undergraduate Researcher | 05/2024 - 08/2024

- Developed Python Application to allow customizable viewing of Microscope Recordings.

- Training an **AI-powered Computer Vision model** to analyze Microscope Recordings and tracks the position and shape of cells throughout the video.

Scientific Games

Software Development - Game Generation | 07/2022 - 05/2023

- Developed a Windows Application using the .NET framework to assist game developers by creating an interactive checklist application that was able to track requirements and allow developer comments on each item.

- Created a library in C# to implement a Linked List, Min Heap, Hash Map, Merge Sort and Heap Sort methods. Then utilized the library to create a program that checked extremely high volumes of lottery tickets for duplicate patterns before delivery to client.

- Implemented a Windows Application using the .NET framework that utilized Cleopatra and internal server API calls in order to automate the encryption process of finished products.

Projects

Music Genre Classification ML Models: Performed various methods of data pre-processing including Principal Component Analysis and Gaussian Mixture Modeling Trained various types of models to find the best performance, including Naive Bayes, Neural Networks, Convolutional Neural Networks, Random Forest.

Github: <https://github.com/AnishKV1230/ML-Project>

Sprint/Gait Analysis CV Model + Dashboard: Collected data and utilized it to train and test various computer vision models which analyzed joint and foot movement of runner's in a video and created a dashboard to visualize the biometric data.

Github: https://github.com/AnishKV1230/sprint_analysis_4305

Skills

Python, AWS, C/C++, SQL, JavaScript, .NET, Agile Software Development, React, C#, Java, Figma, Machine Learning, AI, Client Facing Software, Algorithm Design, Qiskit, Research Laboratory Experience, Research & Technological Development, Mathematics, Science, STEM, Tutoring, Lesson Planning, Curriculum Development, Testing Help, Communication skills, Documentation review, Computer literacy