

# Shanthan Gunti

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## EDUCATION

### UNIVERSITY OF MARYLAND, BALTIMORE COUNTY

Expected: May 2025

- Bachelor of Science in Computer Science (focus on Artificial Intelligence & Machine Learning)

## SKILLS

Programming Languages	Proficient in C/C++, Python, x86 Assembly, Java, SQL
Technical Skills	NLP, Data Modeling, Machine Learning, version control, Data Visualization(Tableau)
Tools & Operating Systems	Linux, Windows, Numpy, Pandas, Matplotlib, ScikitLearn, Openai, LangChain

## RELEVANT COURSEWORK

Data Structures(C++), Intro to Machine Learning(Python), Statistics & Probability, Linear Algebra

## EXPERIENCE

### AI4ALL COLLEGE PATHWAYS

#### Discover AI

February 2022 - May 2022

- Explored foundational AI concepts including gradient descent and neural networks, while analyzing ethical considerations in data processing and AI deployment.
- Collaborated on a project analyzing data relevant to AI's role in breast cancer detection.
- Achieved 98% accuracy in classifying cancerous and healthy cells using binary linear classification.

### AI4ALL COLLEGE PATHWAYS

#### Apply AI

September 2022 - December 2022

- Acquired proficiency in neural network concepts, regression, classification algorithms, and diverse learning methodologies, bolstering practical application expertise.
- Collaborated with a team to develop a project focused on analyzing sentiment in Reddit posts using Natural Language Processing techniques.
- Implemented Bayesian networks for binary classification, distinguishing results into either "depressed" or "not depressed" categories with high accuracy and reliability.
- Collaborated with a mentor to enhance technical skills in data sourcing, organization, visualization, implementation, and evaluation, gaining valuable insights and experience.

## PROJECTS

### Reddit Posts Sentiment Analysis Project (Independently executed project)

- Employed multiple natural language processing algorithms to evaluate sentiment accuracy within Reddit posts, enhancing analytical insights.
- Implemented the TF-IDF statistic to extract insights into the importance of words within each post, contributing to comprehensive sentiment analysis.
- Utilized the Vader sentiment analysis tool to assign sentiment scores to individual words and phrases, enriching the depth of sentiment analysis.
- Leveraged the BERT model from the Transformers library by Hugging Face to evaluate sentiment and identify wordplay nuances within Reddit posts, achieving enhanced accuracy and understanding.
- Analyzed data from reddit posts to train an AI to predict signs of depression using supervised learning, NLP, and sentiment analysis.

### AVL Tree & Hash Maps Class Project

- Created AVL Tree and Hash Maps in C++ to master efficient data storage and retrieval and demonstrated understanding of hashing concepts through practical application.
- Developed AVL Tree for balanced binary searching and deployed Hash Maps for rapid data retrieval.