
BHAVA SAMHITHA JONNGADLA

Graduate Applicant
(University at Buffalo)

Kurnool, India,
samhithaprasad7@gmail.com -

Education

Vellore Institute of Technology, Bachelors in ECE specialization in Biomedical Engineering GPA: 8.11/10	Vellore, India July 2019 – July 2023
Bhashyam Girls College, 12th Standard in Maths, Physics and Chemistry GPA: 9.83/10	Guntur, India June 2017 – May 2019
Bhashyam Public School, 10th Standard GPA: 9.8/10	Guntur, India June 2016 – May 2017

Work Experience

Visteon	Trivandrum, Kerala July 2023 - July 2024
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Software Engineer

Working as a software engineer in Visteon corporation which involves interpreting the Customer Requirements for the cluster Projects and translate them into efficient High level design material and prepare detailed design, Implement the design in embedded C and test them using VCAST/ CCP/ N UNIT/ Manual methods.

Motion Prediction of Autonomous Vehicles using Reinforcement Learning	Vellore, Tamil Nadu July 2022 – May 2023
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Capstone Project

In this research we assessed the effectiveness of different deep learning models in predicting movements of nearby vehicles and pedestrians by evaluating their root mean square error score. These deep learning models leverage the current state of the surrounding environment to forecast the motion of traffic agents.

Publication link: <https://isjem.com/volume02issue04april20232/>

Apollo Institute of Medical Sciences & Research	Chittoor, Andhra Pradesh June 2022
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Intern

Worked as an intern at The Apollo Medical College which involved observing, understanding and working on the medical instrumentation and gathering the data about varieties of equipments.

SRM Institute of medical science	Chennai, Tamil Nadu June 2022
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Intern

Worked as an intern at PERS Biomedical Engineering Services at SIMS hospital which involved learning and understanding the job of biomedical engineer and the instrumentation of the biomedical equipments such as MRI, CT, X- rays etc.

Project Experience

- **Breast Cancer Classification using Artificial Intelligence** - We have built an algorithm based on Convolution neural network (CNN) a form of artificial neural network mainly used for image recognition and processing and VGG model architecture to train the model for this binary problem, mainly dedicated for processing pixel data to automatically identify whether a patient is suffering from breast cancer or not by looking at biopsy images.
- **Informative Website** - Constructed the database and organized the data effectively and used ajax tools to increase the speed of website. Developed Admin page to edit database using PHP, JQuery.
- **Restaurant Business Database** - To develop a Restaurant Business Database software and android app that can monitor all the orders and delivery more easily, accurately and accordingly.
- **5- Stage MIPS Processor – Computer Architecture** - Developed a 5 stage pipeline MIPS processor with verilog (behavioral modeling). Separate floating-point arithmetic hardware was incorporated in the design with all exceptions handling capability. Designed Forwarding unit and exception handling units such a way that to minimize pipeline stalling. Results were simulated on Modelsim.
- **Pathfinding Game** - Designed a game using pygame library for GUI. Finds the shortest path between two dynamically selected points through obstacles using the A* algorithm
- **Home security system using GSM module, PIR sensor and Digilock** – It is a general home security system using a GSM module and a PIR sensor which we designed to give a call and SMS to a pre-specified phone number when any kind of intrusion is found.

Certifications

VIGOS – Completed internship program “Data Science” from 4th July 2021 to 4th September 2021

Leadership & Activities

VIT University
Project Lead

Vellore, Tamil Nadu

Took the leadership in the projects and researches we did with active participation in team as well as participating in all the technical aspects.

Bhashyam Public school
Throw ball and Handball Captain

Kurnool, Andhra Pradesh

I was given the captaincy in sports in my 8th standard

Skills & Interests

Technical:

Python (Basic Level)
Assembly Language

Object oriented and Programming (C/C++ language)
Linear Algebra, Calculus and Statistics
Embedded C
Machine Learning and Deep learning

Language:

English (Fluent)
Telugu (Fluent)
Hindi (Basic Level)
French (Basic Level)

Interests:

Photography
Reading novels
Basket ball

Volunteer Experience

Participated as a volunteer on behalf of Environmental Protection and Awareness Club as a part of cleanup drive in campus on 2nd October 2019.
