

Jayanth Bontha

P: +91 9014889700 | jayanth2921@gmail.com

EDUCATION

Keshav Memorial Institute of Technology

Expected July 2025

Bachelor of Engineering

Major in Computer Science

Cumulative GPA: 8.7/10

Relevant Coursework: Data Analysis, Software Engineering; Operating Systems; Algorithms; Artificial Intelligence

SKILLS

Technical Skills: PyTorch, TensorFlow, Huggingface, Large language models, Linux, React, Bootstrap, NodeJS, MongoDB, ExpressJS, Django, Flask, SQL, Git, Github

Computer Languages: C/C++, Python, Java, HTML/CSS, JavaScript

Certifications & Training: [Udacity AI Programming with Python NanoDegree](#)

UNIVERSITY PROJECTS

MULTI -DOCUMENT SUMMARIZATION USING LLAMA-2

Oct 2023

- Employed Linux Virtual Machines (NVIDIA GPU Instances) and Storage buckets to finetune Llama2 large language model with Qlora-PEFT, a method that requires 90% less memory and time. Utilized recursive text splitting and context grouping techniques to summarize complex documents exceeding context length, resulting in improved document understanding and readability.
- Synthesized a powerful dataset by amalgamating 17 diverse sources, curating high-quality subsets, and enhancing depth with synthetic data.

BREAST CANCER DETECTION APP

Feb 2023

- Developed a Multi-Step Deep Learning Model(first of its kind) for predicting breast cancer presence and intensity from IHC stained biopsy images.
- Used Mask-RCNN for image segmentation and integrates K-Means and random forest classifiers for multiple stages of image classification. Implemented with an All-Red Scoring system for prognosis, the model is built on a React framework and communicates with a Flask Server hosted on an AWS EC2 Instance.
- Key achievement is its ability to replace manual cell counting and classification, reducing the time required for diagnostic tests by 50%, increasing productivity and decreasing costs.

MALARIA CLASSIFICATION WEB APP -> [Medium Article](#)

Oct 2022

- Developed a React application utilizing a CNN model to predict malaria presence in thin blood smears.
- Deployed the app on Railway with an ExpressJS backend. Implemented user profile system with MongoDB integration, demonstrating proficiency in React, ExpressJS, and database management.

EXPERIENCE

International Finishing School, KMIT

Mar 2022 – Apr 2022

Teaching Assistant

- Actively contributed to curriculum development, crafting engaging course materials for Python training sessions, enhancing the overall educational experience for private students in Ghana

Syllabus taught includes:

- Introduction to Python (data types, control structures, functions).
- Internet Of Things (sensor networks, communication protocols, IoT applications).
- Machine learning (Fundamental concepts, supervised and unsupervised learning, model).

ACHIEVEMENTS

- Recognized as "Pioneer" among 200 students for exemplary contributions to the Breast Cancer Detection project
- Qualified Hacktoberfest-2023 by demonstrating expertise through significant contributions to 2 Open Source Projects
- Distinguished for exceptional proficiency in Reinforcement Learning: Secured position in the top 1\% of participants in the AWS DeepRacer Student League
- Integral contributor: Core member of Recurse, KMIT Coding Club
- Chosen for KAVACH 2023, a prestigious National-Level Hackathon in Cyber Security