

VENKATESAN M

UNDERGRADUATE COMPUTER SCIENCE STUDENT

CONTACT

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EDUCATION

Bachelor of Technology In Computer Science and Engineering
Vellore Institute of Technology
2022 - 2026
CGPA : *8.92
High School Diploma in Computer Science and Maths (CBSE).
Kendriya vidyalaya
(2010 - 2022)
Score : 92%

CERTIFICATION

The Complete 2024 Web Development Bootcamp
Supervised Machine Learning: Regression and Classification

WORK EXPERIENCE

Linux Club VIT, Chennai
Team Lead
July 2023 - Present
Led the Design Works of the Media department with a team of 25 Talented Designers.
Designed Various Event Posters, Social Media Promotion Designs Including Photos & Videos
Grew LUGVITC Social Media Page Followers by 50 percent by Engaging Content Creation.
Rex Industries
Robotics Software Developer
Nov 2023 - Jan 2024
Worked on Ideation of Quadrupled Robot and Worked on Reinforcement Learning (Isaac sim)

SKILLS

Programming Languages : Python, JavaScript, C/C++, Java, Dart.
Front-End Technologies : ReactJS, ThreeJS, MUI, Tailwind, Flutter.
Back-End Technologies : NodeJS, ExpressJS.
Data-Base Technologies : MongoDB, SQL, FireBase.
Other-Tools : Arduino, Git/Github, Linux, Blender, Figma, ROS.

PROJECTS

Quadruped Robot - Alpha!

Introducing our Quadrupled Robot Alpha! Won 2nd Prize @Autodesk Instructables Robot contest

Led development of Quadrupled Robot Alpha, a Boston Dynamics Spot Mini-inspired project. Achieved MVP in one month with a \$200 budget. Implemented 12 DoF biomimetic movement, Inverse Kinematics for versatile motions, and integrated ESP32 Cam for live stream and YOLOv3 Algorithm for object detection. Future plans include firmware enhancement, custom controller app, and Lidar sensor integration.

Take a look at our presentation - <http://surl.li/nyspg>

Deep Learning for Medical Image Segmentation

Brain metastasis detection and segmentation, Collaborated with Nagasaki University
Enhanced the Stanfordaiml BrainMetShare dataset by converting the nii format to jpg increasing the usability from 2.5 to 5 Kaggle Score.
Implemented a modified U-Net generator for improved image segmentation.
Defined loss functions and optimized model performance using Adam optimizers.
Enhanced deep learning methods for more accurate brain metastasis detection.

Take a look at our Project - <https://www.kaggle.com/code/venka18tesan/brain-metastases-project>

WeMace: Women Empowering Markets & Connecting Enterprises

Flutter app for Self Help Groups (SHGs) to promote collaboration, resource sharing, and positive change, promoting collective growth and impact.

Led a Team to develop a Cross-Platform App using Flutter, Riverpod and BLOC on the front end. Implemented FireBase for the backend and DataBase, integrating Gemini Pro and Gemini Vision Pro for AI Chat. Utilized Android Studio as a build tool. Conducted both Offline and Online Surveys to Validate our idea, hear from Users and Test with SHG's Members. Submitted For Google Solution Challenge 2024

Take a look at the Project- https://github.com/WeMace/Flutter_App

Portfolio Website

"Room Portfolio": A 3D masterpiece crafted with THREEJS, GSAP, and Asscroll for a seamless web experience.

Developed "Room Portfolio" using THREEJS, GSAP animations, and Asscroll for a seamless web experience. Modeled house in Blender3D, exported as GLB, and loaded on canvas using GLTF/DRACOLoader. Implemented GSAP for timeline animation triggered by Scroll-Trigger. Achieved smooth scrolling with Asscroll. Inspired by Bokoko, mentored by Abigail Bloom.

Take a look at Live-Website- venka-tesan-portfolio.vercel.app