

PRANAV MURALIDHAR

Bengaluru, Karnataka, India

+91 6360878206 pranavmuralidhar27@gmail.com LinkedIn Portfolio

Education

PES University

Master of Technology - Computer Science and Technology, CGPA: 7.82/10.0

Bengaluru, Karnataka

2024 – 2026

KLE Dr M S Sheshgiri College of Engineering and Technology

Bachelor of Engineering - Computer Science and Technology, CGPA: 7.96/10.0

Belgavi, Karnataka

2020 – 2024

KLE's G.I.Bagewadi PU College, Nipani

Karnataka State Board, Percentage: 81.83

Nipani, Karnataka

2019 – 2020

Technical Skills

Programming Languages: Java, Python, SQL, HTML, CSS, JavaScript

Frameworks & Libraries: NumPy, Pandas, OpenGL, GLUT

Database Technologies: MySQL, Database Management System

Core Competencies: Data Structures and Algorithms, Object-Oriented Programming, Machine Learning

Work Experience

Persistent Martian Program

2023

Persistent Systems, Bengaluru, Karnataka

Online

- Completed comprehensive training program in Core Java programming, focusing on object-oriented programming principles and data structure implementation
- Gained hands-on experience in Database Management Systems (DBMS), including database design and data integrity concepts
- Developed foundational skills in software development practices and database optimization techniques
- Successfully completed coursework in enterprise-level programming concepts and best practices

Projects

Avatar Generation in Metaverse Using Sentiment Analysis | Python, Machine Learning, AI

Present

- Engineered real-time avatar generation system using Generative AI and Machine Learning models (GANs, Diffusion Models) to create dynamic, personalized avatars based on user sentiment and facial expressions
- Implemented computer vision algorithms for real-time facial expression analysis, achieving 85% accuracy in emotion detection
- Developed scalable backend architecture processing live data streams with 99% uptime, eliminating manual design requirements
- Built responsive user interface supporting personalization features, resulting in highly customized user experiences

2D Car Racing Game | OpenGL, GLUT, C++

Mar 2025

- Developed interactive 2D racing game featuring real-time graphics rendering, collision detection algorithms, and responsive WASD control system
- Implemented dynamic obstacle generation engine with procedural content creation, increasing gameplay variety by 70%
- Optimized game performance achieving consistent 60 FPS through efficient memory management and rendering pipeline optimization
- Designed modular architecture with separate rendering systems for sprites, textures, and UI components, improving code maintainability

Smart Navigation Stick for Visually Impaired | IoT, Arduino, Sensors

Jan 2024

- Developed IoT-based assistive technology featuring ultrasonic sensors, buzzer alerts, and vibration feedback for obstacle detection
- Implemented real-time hazard detection system with 95% accuracy, enhancing user safety and independent navigation capabilities
- Integrated wireless connectivity and mobile app interface for remote monitoring and configuration
- Conducted user testing with 20+ participants, receiving 90% positive feedback on usability and effectiveness

Achievements

Awards:

- Recipient of prestigious scholarship from Karnataka State Council for Science and Technology (KCST) for exceptional final year project performance
- Selected for state-level project presentation based on 60% efficiency improvement in assistive technology development