AVINASH

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Recent computer science graduate and aspiring fresher Java developer with a strong foundation in Core Java, basic Python, and SQL. Proficient in Git and GitHub for version control and collaborative projects. Possess strong problem-solving skills and a passion for creating efficient and scalable solutions. Seeking an entry-level Java developer role to apply academic knowledge and contribute to innovative projects in a dynamic team environment.

EDUCATION-----

• BE (CSE) 2020-24
College: Dr. Ambedkar Institute of Technology Bangalore

CGPA: 7.98

PUC
 College: Diamond IND PU College
 Bhalki

Percentage: 86.16%

• SSLC April / 2018 School: Basava Teerth Vidya Peeta School Hallikhed (B)

Percentage: 91.84%

SKILLS-----

• Programming Languages: Java, Python (Basic), C.

• Database: SQL.

• Data Structure and Algorithm: DSA with Java.

• Tools: Git, github.

• Soft Skills: Communication, Problem solving.

• Web Development: HTML, CSS.

CERTIFICATIONS------

- NPTEL Google Cloud Computing Foundation
- NPTEL Data Base Management System.

TRAINING------

Basent Technology:

• I have successfully completed a comprehensive Java training program at Basent Technologies, earning certification ID BT-FT-296017 on April 25, 2024. This program covered core concepts, advanced techniques, and practical applications, enhancing my proficiency in Java development and equipping me to tackle complex programming challenges.

PROJECTS-----

Agricultural management:

- Utilized HTML, CSS, PHP, and SQL technologies to create an interactive and user-friendly platform for effective financial planning, optimizing crop yield by showing prices of yields in different locations, and leveraging XAMPP software to streamline the development process.
- The platform allows users to view product prices, photos, and videos, along with the location of stores or farms, facilitating informed purchasing decisions and enhancing the visibility and sales of local farmers and vendors by offering a comprehensive digital marketplace.
- This comprehensive digital marketplace ultimately improves financial planning and decision-making for agricultural businesses by providing a platform for effective financial planning, optimizing crop yield, and facilitating informed purchasing decisions.

AI Virtual Mouse:

- Developed an innovative virtual mouse system integrating MediaPipe Hands for real-time live palm detection and PyAutoGUI for intuitive cursor control and click-and-drag functionality. This system accurately tracked all hand landmarks, enabling precise cursor movements and enhanced user interaction.
- Achieved significant improvements in user experience and cursor control precision by 60% through the seamless integration of computer vision and machine learning principles. By leveraging MediaPipe Hands' capabilities, the system interpreted hand gestures in real-time, translating them into responsive cursor actions with high accuracy.
- Implemented advanced features such as voice-to-text and text-to-voice functionalities using Google Translate libraries. These features were activated through specific hand gestures, showcasing robust software integration skills and enhancing overall user accessibility to the virtual mouse system.

Driver Drowsiness Detection (IOT based):

- Developed and deployed a driver drowsiness detection solution using Python, OpenCV, and Keras on Raspberry Pi, achieving 95% accuracy in real-time assessment of driver alertness through live video analysis.
- Engineered an IoT-driven system to enhance driver safety by promptly detecting signs of drowsiness, triggering alarms to mitigate potential fatigue-related incidents and ensure proactive intervention.
- Validated the effectiveness of the solution across diverse driving conditions, demonstrating its robust performance and reliability in reducing risks associated with driver fatigue through innovative edge computing and deep learning techniques.

Detecting microplastics in aquatic bodies using object detection model:

- Developed a YOLOv5-based model in Python to detect microplastics in aquatic environments with 93% accuracy, leveraging OpenCV for image processing, NumPy for data manipulation, and Pandas for analysis.
- Implemented real-time image and video capture using a microscope, enabling precise analysis and quantification of microplastic pollution in aquatic bodies, enhancing environmental monitoring capabilities.
- Utilized a comprehensive stack of OpenCV, NumPy, Pandas, and OS libraries to integrate advanced image processing and object detection functionalities, optimizing the model's performance in identifying microplastics in real-world aquatic scenarios.

LANGUAGE------

- Kannada
- English
- Hindi

INTERESTS-----

- Chess
- Cricket