NILACHALA SAHOO

nilachalasahoo9777@gmail.com https://linkedin.com/in/nilachalasahoo https://github.com/nilachalasahoo +916370572014

EDUCATION

Indira Gandhi Institute of Technology, Sarang — August'20 - Present
Bachelor of Technology in Computer Science — CGPA: 9.57/10.0

Sulagna Higher Secondary School, Balasore — June'18 - April'20
CHSE(XII) — Percentage: 90.33%

Nara Singha High School, Karanj — June'15 - April'18
BSE Odisha(X) — Percentage: 90.00%

SKILLS

Languages: C/C++, C#, Java, Python, JavaScript
Frontend/Backend: HTML/CSS, Spring Boot, ASP.NET
Database: MS SQL Server, Postgresql
Technical: Data Structure & Algorithm, Object Oriented Programming
Packages/Libraries: OpenCV, Tensorflow, keras, Numpy, Pandas, matplotlib

EXPERIENCE

DRDO, Balasore | User IP Info — May'23 - June'23

- Contributing to the development of a web application, 'User IP Info'. Utilized ASP.NET MVC framework and C# along with MS SQL Server for application development. Proficiently integrated Microsoft SQL to manage and track on IP addresses.
- Implemented essential features, including user authentication, search capabilities, and comprehensive CRUD operations. Designed a user-friendly interface for storing IP address information and privacy through restricted user authentication.
- Notably, the technology we collectively contributed to is now actively utilized within the organization, underscoring the invaluable impact of our work. This experience provided me with profound insights into software development and database management, all within the esteemed research environment of DRDO.

PROJECTS

Algo Wave | JavaScripts, HTML, CSS, Data Structures, Visual Studio Code — January'24 - Present

- Algo Wave, a website built with HTML, CSS, and JavaScript, visually demonstrates algorithm functionality, bridging the gap between theoretical concepts and real-world implementation, particularly showcasing data structure applications.
- Features real-time performance metrics, providing an on-the-fly assessment of algorithm efficiency, enhancing the platform's practical utility.
- Boasts a responsive design, ensuring seamless user access across various devices, while also offering customization options to facilitate user input and experimentation.

Agro Help | Python, CNN, OpenCV, Tensorflow, matplotlib, HTML/CSS, Flask, Jupyter Notebook — February'23 - May'23

- Developed an AI-powered website to aid farmers in rapidly identifying and managing plant diseases from images. Envisioned a project that promises to significantly reduce crop losses and improve the livelihoods of farmers through early disease detection.
- Trained a robust Convolutional Neural Network (CNN) model on a diverse dataset of 40 plant disease classes, ensuring high accuracy in disease recognition. Implemented image data transformations and cross-validation techniques for optimize model performances.
- Designed a user-friendly interface, allowing farmers to effortlessly upload images of afflicted plants for immediate analysis, enhancing accessibility and usability. Utilized Flask for backend integration, facilitating imageprocessing and disease diagnosis.

Sudoku Solver | Java, Data Structures, Recursion, Backtracking, Visual Studio Code — December'22 - January'23

- Developed a Java-based Sudoku solver utilizing recursion and backtracking algorithms to efficiently solve 9x9 Sudoku puzzles, which include unique values in rows, columns, and 3x3 sub grids, as well as values within the range of 1 to 9.
- Implemented comprehensive error detection and input validation mechanisms to ensure the solver can identify unsolvablepuzzles and detect incorrect user inputs, showcasing attention to detail and a commitment to high-quality result.

Tic Tac Toe | Java, Data Structures, Object Oriented Programming, Visual Studio Code — October '22

- Created a popular Tic-Tac-Toe game in Java, adhering to object-oriented programming (OOP) principles. Designed and implemented an interactive user interface that allows two players to enter their names and symbols ('X' and 'O').
- Implemented robust error handling mechanisms to gracefully manage incorrect inputs, including invalid position choices and occupied cells. Provided clear error messages and enabled players to re-enter their choices.
- Developed the core game logic, which included real-time board updates after each player's move, including the game board, checking for winning conditions, and ending the game when a player wins or the board is full.

Certificates

- Certificate of Excellence in Introduction to Java by Coding Ninjas.
- Certificate of Excellence in Data Structures using java by Coding Nijas.
- AWS Academy Graduates – AWS Academy Cloud Foundations.
- AWS Academy Graduates – AWS Academy Data Analytics.

ACHIEVEMENTS

- Pathani Samanta Scholarship recipient during 6th grade.
- Received the National Merit-Cum-Mean Scholarship during the 8th grade.
- Secured the 2nd position in the District Road Safety Contest.