

Education

Thapar University

Bachelor of Engineering in Computer Science

Sep. 2021 – May 2025(expected)

Patiala, Punjab

BCM Arya Model Senior Secondary School

High school degree - CBSE

Jul 2021

Punjab, India

Relevant Coursework

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|---------------------|-----------------------|---------------------------|-------------------------|
| • Data Structures | • Algorithms Analysis | • Artificial Intelligence | • OOPS |
| • Operating Systems | • Database Management | • Computer Networks | • Computer Architecture |

Projects

Robotic Car | *C++,Python,Embedded C*

March 2022

- Developed a robotic vehicle solution with embedded software that autonomously navigates and avoids obstacles; optimized sensor integration, resulting in a 50 percent reduction in processing time and enhancing overall operational efficiency.
- The car follows a path and adjusts movement based on sensor input,Key components include Arduino, motors, motor driver, sensors, and a power supply.
- Future upgrades include integrating advanced sensors like LIDAR, applying machine learning for adaptive navigation
- The robotic car project emphasizes real-time decision-making, autonomous navigation, environmental adaptation, safety protocols.

Hospital Management System | *Java,Node.js,React.js,Mongo Db*

June 2023

- Created an Web application using Java and Node.js to manages patient records, appointments, and billing efficiently.
- Processed user inputted information in the back-end of Website to return a appointment based on the availability.
- Designed and developed an intuitive user interface for a hospital management system, enhancing user experience and improving navigation for healthcare professionals and patients.

Unbeatable Tic Tac Toe | *HTML, CSS, JavaScript,Python (Minimax Algorithm)*

December 2023

- Designed a Tic Tac Toe game which implements Minimax for unbeatable gameplay.
- Used JavaScript with HTML,CSS to create a GUI with AI logic to ensure the computer always wins or draws, featuring a clean, user-friendly interface.
- Conducted thorough testing and debugging of the game to ensure a seamless user experience, focusing on responsive design and smooth interaction across device.

Technical Skills

Languages: Python, Java, C, C++, SQL, NoSQL, R

Developer Tools: VS Code, Android Studio, AutoCad

Technologies/Frameworks: Linux, GitHub, ReactJS, NodeJS, Git, Mongo, Flutter

Leadership / Extracurricular

Player,National Softball Team (Punjab): Proudly represented the Punjab National Softball Team,showcasing athletic skills and dedication at the national level.

First Prize, National Science Olympiad: Awarded 1st prize in an Science Olympiad at national level.