GURSEWAK SINGH

SENIOR COMPUTER SCIENCE STUDENT

+91-9779903901 | gs19175119@gmail.com | Linkedin | Portfolio

Education

Thapar Institute of Engineering and Technology, Patiala Computer Science & Engineering(4th year) | CGPA: 7.53 GTB Public School, Faridkot CBSE (Class XII), Aggregate:95.8% Dasmesh Public School, Faridkot CBSE (Class X), Aggregate:96.6%

Skills

Computer languages C++ | C | Python | HTML | CSS | JavaScript **Computer frameworks** ReactJS | MySQL | Git | Flutter

Projects

Exercise Accuracy Detection using Smart Wearables

July'24

Developed a reliable solution using smart wearables to access exercise positions.

- Hardware involves working with Arduino and advanced IMU Sensors that give inputs from the wearable.
- Built using RNN, SVM and Random Forest Algorithm. Also includes hyperparameter tuning via cross validation.
- Tech stack used: Python, Pandas, TenserFlow, Scipy, Android Studio, SQLite, Kafka.

The Lighthouse May'24

Built a Lighthouse along the seashore which works in simulation of patrolling in the night.

- Implemented using OpenGL and GLUT libraries.
- Used timing functions to and transform techniques to create animations like switching between day and night.
- Tech stack used : C++, Visual Studio, OpenGL.

Portfolio June'23

Made a basic portfolio website.

- Made a portfolio website using basics of front-end web development and hosted it using github pages.
- Tech stack used : HTML, CSS, Javascript

Medical Records Database System

May'23

- Made a website which stored data about patient's health and medicines required.
- Database was made using python and PL/SQL which was stored in the backend.
- PHP was used in the construction of the website.
- Tech stack used: HTML, CSS, Javascript, PL/SQL, PHP.

Robotic Arm June'22

Made a robotic arm which picked up objects and put them in another place.

- Developed the arm using basics of robotics and arduino programming.
- Tech stack used : Arduino Programming.

Academic and Extracurricular Achievements

- Olympiads & Examinations: Cleared NTSE Stage-1 Examination and secured AIR 86 in 15th National Science Olympiad. Also secured 25th Rank in I-Quest's Scholastic & Mental Ability Test 2018.
- Basketball: Won multiple medals in Intra-University and Inter-University competitions including Gold at Ran-Neeti, IIT Mandi (2022) & Silver at URJA, Thapar University(2023).
- **School Band:** Represented my school band and secured 2nd position at International School Student's Carnival held at Punjab Degree College, Faridkot. Also took part in parades held on Republic day and Independence day.
- Music & Orchestra: Secured 1st Division in Tabla playing for 2 consecutive years in sangeet bhushan. Can play multiple instruments like drums, congo, bugle etc and represented the school in state-level instrument playing competition.