

# GURSEWAK SINGH

SENIOR COMPUTER SCIENCE STUDENT

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## Education

<b>Thapar Institute of Engineering and Technology, Patiala</b> <ul style="list-style-type: none"><li>Computer Science &amp; Engineering(4th year)   CGPA: <b>7.53</b></li></ul>	<b>2021 - 2025</b>
<b>GTB Public School, Faridkot</b> <ul style="list-style-type: none"><li>CBSE (Class XII), Aggregate:95.8%</li></ul>	<b>2020 - 2021</b>
<b>Dasmesh Public School, Faridkot</b> <ul style="list-style-type: none"><li>CBSE (Class X), Aggregate:96.6%</li></ul>	<b>2018 - 2019</b>

## Skills

**Computer languages** C++ | C | Python | HTML | CSS | JavaScript

**Computer frameworks** ReactJS | MySQL | Git | Flutter

## Projects

<b>Exercise Accuracy Detection using Smart Wearables</b> <i>Developed a reliable solution using smart wearables to access exercise positions.</i> <ul style="list-style-type: none"><li>Hardware involves working with Arduino and advanced IMU Sensors that give inputs from the wearable.</li><li>Built using RNN , SVM and Random Forest Algorithm. Also includes hyperparameter tuning via cross validation.</li><li>Tech stack used : Python, Pandas, TensorFlow, Scipy, Android Studio, SQLite, Kafka.</li></ul>	<b>July'24</b>
<b>The Lighthouse</b> <i>Built a Lighthouse along the seashore which works in simulation of patrolling in the night.</i> <ul style="list-style-type: none"><li>Implemented using OpenGL and GLUT libraries.</li><li>Used timing functions to and transform techniques to create animations like switching between day and night.</li><li>Tech stack used : C++, Visual Studio, OpenGL.</li></ul>	<b>May'24</b>
<b>Portfolio</b> <i>Made a basic portfolio website.</i> <ul style="list-style-type: none"><li>Made a portfolio website using basics of front-end web development and hosted it using github pages.</li><li>Tech stack used : HTML, CSS, Javascript</li></ul>	<b>June'23</b>
<b>Medical Records Database System</b> <i>Made a website which stored data about patient's health and medicines required.</i> <ul style="list-style-type: none"><li>Database was made using python and PL/SQL which was stored in the backend.</li><li>PHP was used in the construction of the website.</li><li>Tech stack used : HTML, CSS, Javascript, PL/SQL, PHP.</li></ul>	<b>May'23</b>
<b>Robotic Arm</b> <i>Made a robotic arm which picked up objects and put them in another place.</i> <ul style="list-style-type: none"><li>Developed the arm using basics of robotics and arduino programming.</li><li>Tech stack used : Arduino Programming.</li></ul>	<b>June'22</b>

## Academic and Extracurricular Achievements

- Olympiads & Examinations:** Cleared NTSE Stage-1 Examination and secured AIR 86 in 15<sup>th</sup> National Science Olympiad. Also secured 25<sup>th</sup> 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 2<sup>nd</sup> 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.