SHIVIN GOYAL

Aspiring Computer Science student in Software Development, Data Analysis,AI, and Emerging Technologies.

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Degree/Board	Year	Institute	%age/CGP A
B.Tech Computer Science Engg.	2023-2027	Punjab Engineering College, Chandigarh	7.73/10
12th (CBSE)	2023	Gurukul Global School,Chandigarh	90%
10th (CBSE)	2021	Gurukul Global School,Chandigarh	96%

EXPERIENCE:

Web Development Intern

Contributed to front-end development by identifying and resolving technical and visual bugs in their production-ready website.. Collaborated closely with the design team to align UI/UX standards, gaining exposure to corporate workflows, version control, and team-based project management.

• Research Paper

Developed a computational workflow using AutoDock and COMSOL to simulate, test, and analyze chemical interactions, streamlining a previously manual screening process. Handled large simulation datasets, leveraging a Gibbs free energy—based ranking system to identify and prioritize the most effective ligand-target complexes for validation. Created 3D visualizations with BIOVIA Discovery Studio to verify simulation results and present insights clearly to the research team. This approach accelerated the R&D process by several months, cut experimental costs, and helped the lab focus on the most promising compounds.

RC Gripper Bot for IIT Delhi Techfest

As the team leader, I led end-to-end development of a robot using C/C++, Arduino/Raspberry Pi, and AutoCAD, applying core robotics skills in design, assembly, and programming.

PROJECTS:

Personal Resume Website

Built and deployed a React.js portfolio with custom CSS, EmailJS-powered contact form, modular components, and smooth scrolling. Hosted on a .info domain via Vercel with GitHub.(link - www.shivingoval.info)

• Chat with Youtube

Developed an Al-powered Streamlit application to analyze YouTube videos using Gemini LLM, transcripts, and key frames.Implemented semantic search with sentence embeddings, enabling real-time Q&A and video summarization.(link - Github)

Contact Manager

Built a Contact Manager web app using React, implemented responsive UI with dynamic state management and local storage for data persistence. Modular code structure enhanced maintainability and scalability.(link - Github)

SKILLS:

- Technical Skills:C, C++, Python, HTML, CSS, JavaScript, React, Next.js, SQL, Streamlit, Vertex Al, Gemini (Generative Al), COMSOL, AutoDock, BIOVIA Discovery Studio, Data Structures & Algorithms, Object-Oriented Programming (OOP), Machine Learning, Neural Networks, Application Development, Web Deployment.
- Soft Skills: English, Hindi, Punjabi, Problem Solving, Adaptability, Quick Learner, Team Collaboration

LEADERSHIP:

- Sub-head of Event Coordination and Logistics for the Women Empowerment Cell at PEC.
- Class Representative (CR).
- Member at Robotics Society PEC.
- Helped organize and manage AICTA international conference at PEC.
- Member of the Implementation Board (IB) for the PEC ACM Student Chapter.
- Engaged in organizing workshops on Data Science and Machine Learning for junior students.
- Organized Technical Display for TECHADROIT 2024 held at PEC IEEE.

ACHIEVEMENTS:

- https://certificate.com Gen Al Academy Completion Certificate on Hack2Skill.
- https://www.credly.com,earned 15 badges for completion of the GDSC Gen AI Study Jams 2024.
- https://coursera.org ,coursera certification for neural networks.
- https://coursera.org ,coursera certification for Improving deep neural network.
- https://coursera.org ,coursera certification for Structuring machine learning projects.
- https://coursera.org, coursera certification for Convolutional Neural Networks.
- Represented the Indian Team in Roccaraso, Italy, in inline hockey.
- Achieved numerous victories in national and state-level championships for speed skating and inline hockey.
- Competed in prestigious national robotics competitions, including WRO and FLL.
- Won state-level titles in athletics and cycling.
- Awarded over 100 medals in various disciplines.
- Received multiple certificates in recognition of contributions to social events and NGOs.