

PURNIMA SAHOO

Bhopal, Madhya Pradesh

☎ +91 8766432185 ✉ purnimajagganathsahoo@gmail.com 🔗 [linkedin.com/in/purnima-sahoo-61a566252/](https://www.linkedin.com/in/purnima-sahoo-61a566252/)

Education

VIT Bhopal University

Bachelor's in Computer Science and Engineering (B.Tech)

2022 – 2026

CGPA : 8.44

Technical Skills

Programming Languages: Java, Python, C/C++, JavaScript, HTML, CSS

Web Development: React JS, Framer-Motion, GSAP, Flask, Tailwind CSS, Vanta JS, Three JS

Deep Learning: Computer Vision, PyTorch, Tensorflow, Keras, OpenCV

Machine Learning: Scikit-Learn, Generative AI (Gen AI)

Development & Tools: Git, GitHub, Figma, Canva, AWS, Eclipse, Jupyter Notebook, Gen AI

Software Engineering: Data Structure and Algorithms, Object-Oriented Programming, Database Management Systems

Leadership

Linux Club

Research and Development Lead

Feb 2024 – Nov 2024

VIT Bhopal University

- Analyzed data for social media publications, boosting the club's popularity by 10%, and managed a team of 4+ members, improving research quality and scope by 5% to enhance audience engagement and community connection.
- Conducted in-depth research on data trends by analyzing audience preferences and engagement metrics. Utilized insights to optimize future events, adapted content to better align with audience interests. This approach significantly boosted audience engagement and strengthened the club's community connection.

Cyber Warrior Club

Research and Development Lead (Formerly Core Member)

July 2023 – June 2024

VIT Bhopal University

- Directed a research project with a team of 7 members, fostering excellent collaboration through effective communication. Implemented streamlined workflows and regular progress reviews, which improved overall work efficiency by 4%. This resulted in timely project completion and high-quality deliverables.
- Ideated and organized hackathons and games for Advitya 2023, enhancing participant engagement and club visibility.

Projects (github.com/Purnima2004)

SkillCraft | ReactJS, Tailwind CSS, HuggingFace Transformers, GenAI

<https://course-craft-front.vercel.app/>

- Designed and developed a React-based Adaptive Learning System, leveraging dynamic content rendering and intelligent state management, improved efficiency by 10%.
- Enhanced web application performance by integrating JavaScript and Vite, reducing load times and boosting responsiveness by 10%. This was achieved through Vite's fast build tool and modern JavaScript optimizations.

FaceKey | Python, HTML, CSS, Javascript, Git, Flask, PostgreSQL

<https://github.com/Purnima2004/FaceKey>

- Engineered a facial recognition model using OpenCV and dlib, leveraging advanced computer vision techniques to streamline user authentication. This innovation improved login efficiency by 40%.
- Integrated a blink detection mechanism using Eye Aspect Ratio (EAR), a robust computer vision technique, to prevent spoofing attacks such as photo or video-based impersonation, enhancing system security and performance by 30%.

Auto ML Solution | Python, Flask, Git, Streamlit

<https://github.com/Purnima2004/AutoML-Solution>

- Built an automated machine learning pipeline that evaluated multiple algorithms, including SVM, Decision Tree, Random Forest, XGBoost, achieving over 90% accuracy.
- Tested the pipeline on 10+ real-world datasets, demonstrating robustness and strong generalization capabilities, and deployed models using Flask to enable real-time predictions and seamless user interaction.

Achievements

- Smart India Hackathon 2023:** Qualified after excelling through three internal rounds among 500+ participants.
- PredProp Hackathon:** Competed in a 24-hour event with 30+ teams, fostering teamwork and rapid prototyping skills.
- Coding Aptitude:** Achieved a 1500 rating on competitive coding platforms, recognized as a Top Performer in the "Introduction to C++" course by Coding Ninjas with a 94% score (2023), and solved 500+ programming challenges on platforms like LeetCode.
- NPTEL Swayam (IIT Kharagpur):** Earned an Elite Silver badge in Cloud Computing with a 75% score, ranking in the top 5% of 20,000+ participants.
- Coursera:** Completed the IBM AI Engineering Specialization, gaining expertise in machine learning and AI development frameworks.