# Shivansh Vishwakarma



Roll No.: 2203561

B.Tech.

Computer Science and Engineering Guru Nanak Dev Engineering College,  $Github \mid Website \\ linkedin.com/in/shivansh-vishwakarma-a 219a 02a 8$ 

Ludhiana

# EDUCATION

Degree/Certificate	${\bf Institute/Board}$	CGPA/Percentage	Year
B.Tech. (CSE)	Guru Nanak Dev Engineering College, Ludhiana	7.17 (Current)	2022-Present
Senior Secondary	CBSE Board	94.0%	2021
Secondary	Jawahar Navodaya Vidyalaya (CBSE Board)	87.8%	2019

#### **INTERNSHIPS**

# Indian Institute of Information Technology

June 2024 - Aug. 2024

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 $Research\ Intern$ 

Prayagraj

- Worked on Collision Avoidance in Swarm Robotics using Deep Reinforcement Learning, optimizing path-planning algorithms to improve efficiency.
- Implemented efficient algorithms for real-time swarm coordination and navigation, collaborated on designing and simulating swarm behavior for real-world applications.

# Projects

# • Hybrid ML Model for Biogas Prediction and Analysis

Mar. 2025

Academic research project to enhance prediction accuracy of biogas output using diverse feedstocks.

- Tools & technologies used: Python, scikit-learn, Pandas, NumPy, Matplotlib.
- Developed a hybrid ML model combining physical process modeling, Bayesian integration, and regime specialization. Achieved  $R^2 \sim 0.90$  and RMSE  $\sim 7.1$  mL.

• EduAI Feb. 2025

EduAI gives AI-driven guidance with a text editor, helping students learn programming without showing full code.

- Tools & technologies used: Python, HTML, CSS, JavaScript, LLMs, Flask.

· EdTech Buddy

May. 2024

 $EdTech\ Buddy\ of fers\ personalized\ career\ guidance\ post-12th\ using\ CBSE's\ 'Compendium\ of\ courses\ after\ 10+2.$ 

Tools & technologies used: HTML, CSS, JavaScript and BotPress

# KEY COURSES TAKEN

• Data Structure Algorithms, DBMS, Artificial Intelligence, Machine Learning, Operating System, Computer Networks

# TECHNICAL SKILLS

- **Programming:** C/C++,Python,JavaScript,SQL
- Tools & OS: Git, Jupyter Notebook, Google Colab, Linux, Windows
- Libraries/Frameworks: Pandas, Numpy, scikit-learn, TensorFlow, Gym
- Web Skills: HTML/CSS/JS.

#### Positions of Responsibility

• Executive Member, Training & Placement Cell, GNDEC, Ludhiana

Present

• Core Team Member, Data Science Club, GNDEC, Ludhiana

Aug. 2024 - Present

# ACHIEVEMENTS

• Selected as RF Scholar, Reliance Foundation, Received Scholarship for UG program.	2023
• Participated in Google Solution Challenge 2024	
• 3rd Position Holder Git and Linux Workshop and Quiz organized by Causmic Club GNDEC, Ludhiana	2024
• Shortlisted for IDE Bootcamp Edition 2 Phase 2, organised by AICTE, MoE and MIC.	2025

# CERTIFICATIONS

- NPTEL Certification on Social Networks.
- NPTEL Certification on Privacy and Security in Online Social Media.
- NPTEL Certification on Ethical Hacking.
- NPTEL Certification on Organizational Behaviour.
- Python Foundation Certification by Infosys Springboard.
- Interactive Skills Certification by Infosys Springboard.