Dhruv Aggarwal
Email-id : **dhruvaggarwal1901@gmail.com**
Mobile No.: 8864836870
https://github.com/dhruvaggarwal419
https://linkedin.com/in/dhruv-aggarwal-5a0121274

EDUCATION DETAILS

Year	Degree/Exam	Institute	GPA/Marks(%)
Sep, 2022 - Present	B.TECH in Computer Science	Graphic Era University, Dehradun	9.18/10
2022	C.B.S.E	NDS, Shyampur	90.20 %
2020	C.B.S.E	NDS, Shyampur	89.80 %

PROJECTS

- **Operating System Simulator** (Dec, 2024 - Jan, 2025)   **Github**
  Engineered an OS simulator to model key functions such as process scheduling, memory management, and resource allocation, implementing algorithms like Round Robin, FCFS, and SJFS. Enhanced resource utilization by 20% and improved system performance by 25%.
  Tech Stack: C++, Python, Pybind11, Streamlit.

- **Optical Character Recognition System** (Jun, 2024 - Jul, 2024)   **Github**
  Developed a model with 95% accuracy for text recognition, utilizing CNNs, trained on more than 60,000 images and deployed with a responsive interface, improving processing efficiency by 15% through image preprocessing and noise reduction techniques.
  Tech Stack: Python, TensorFlow, scikit-learn, NumPy.

- **Banking Management Application** (Apr, 2024 - May, 2024)   **Github**
  Engineered a banking application with signup, deposit, withdrawal, balance check, ATM card generation, improving transaction speed by 30% and UI engagement by 40%.
  Tech Stack: HTML5, CSS3, JavaScript, MySQL, PHP, Bootstrap, Password Hashing.

- **Big Integer Computational Library** (Dec, 2023 - Jan, 2024)   **Github**
  Developed a library for performing arithmetic operations on large integers (up to 10100), improving computation speed by 40% through optimized algorithms, efficient memory usage, fast execution time, and precise handling of extremely large numerical values.
  Tech Stack: C.

SKILLS

- **Languages:** C, C++, Python, Java, Javascript.
- **Full Stack Web Development:** MERN (MongoDB, Express.js, React.js, Node.js), MySQL, PHP, HTML5, CSS3, Bootstrap, Tailwind CSS.
- **Coursework:** Data Structures and Algorithms, Object Oriented Programming (OOP), Database Management System, Operating Systems, Computer Networks.
- **Machine Learning Tools:** Pandas, Keras, Scikit-learn, Matplotlib, Tensorflow, NumPy.
- **Soft Skills:** Problem Solving, Teamwork, Critical Thinking.

SCHOLASTIC ACHIEVEMENTS

- **Data Structures and Algorithms:** Solved over 600 coding problems in Data Structures and Algorithms on **LeetCode**.
- **Software Development Engineer Internship:** At Technology Business Incubator, Graphic Era University.
- **Merit-Based Scholarship:** Awarded a 70% scholarship for maintaining a CGPA above 9.0, selected among top-performing students.
- **AWS Cloud Training:** Completed 8 courses on AWS Cloud, earning Proficient Badge and gaining hands-on knowledge in cloud services.
- **Coursera Certifications:** Earned advanced certifications in Python, Web Development and Data Structures and Algorithms, demonstrating expertise and achieving distinction.