Dhruv Aggarwal

+91 8864836870 dhruvaggarwal1901@gmail.com LinkedIn Github

Education

Graphic Era University, Dehradun **2022 - 2026**
B.Tech in Computer Science & Engineering *9.18/10 CGPA*

Work Experience

Technology Business Incubator - Graphic Era (Deemed to be University) **Nov 2024 - Feb 2025**
Software Development Engineer Intern *Dehradun, India*

- Worked on software development projects, enhancing application performance and optimizing backend processes.
- Gained hands-on experience in full-stack development, debugging, and API integration.
- Received mentorship from experienced engineers, improving problem-solving and system design skills.
- Utilized HTML, CSS, JavaScript for dynamic UI, PHP and SQL for backend development, and applied OOP principles to build scalable and efficient applications.

SKILLS

- **Languages:** Java (proficient), C++ (proficient), C (proficient), Python, Javascript, HTML5, CSS3, SQL, PHP.
- **Technical Skills:** AI (Machine Learning, Deep Learning), Data Structures and Algorithms, Object-Oriented Programming, Operating System, Database Management System, Cloud Computing.
- **Tools:** GIT, GITHUB, MySQL, Docker, AWS, Linux.
- **Machine Learning Tools:** TensorFlow, Keras, scikit-learn.
- **Soft Skills:** Proficient in English, Collaborative, Leadership, Continuous Learner, Team Management.

Projects

Banking Management Application (Dec, 2024 - Jan, 2025) **Github**

- Engineered a banking application with signup, deposit, withdrawal, balance check, ATM card generation, improving transaction speed by 30% and UI engagement by 40%.
- Implemented robust data encryption protocols, ensuring 100% security of user transactions and safeguarding sensitive information against breaches.
- Tech Stack: HTML5, CSS3, Javascript, MySQL, PHP, Bootstrap, Password Hashing, Object-Oriented Paradigm.

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%.
- Enhanced the system with real-time processing capabilities, accelerating text extraction by 20% and improving overall responsiveness.
- Tech Stack: Python, TensorFlow, scikit-learn, NumPy.

Lung Cancer Classification on MRI Images (Dec, 2023 - Jan, 2024) **Github**

- Engineered a model to classify lung cancer using MRI images, achieving 96% accuracy in detecting malignant tumors and reducing false positives by 12%.
- Optimized data preprocessing pipeline, reducing training time by 25% while preserving accuracy.
- Tech Stack: Python, TensorFlow, scikit-learn.

Optimized Big Integer Computational Library (Aug, 2023 - Sep, 2023) **Github**

- Designed a library for performing arithmetic operations on large integers (up to 10^{100}), improving computation speed by 40%.
- Integrated modular arithmetic functionality, enabling support for 15% faster cryptographic computations.
- Tech Stack: C.

SCHOLASTIC ACHIEVEMENTS

- **Merit-Based Scholarship:** Awarded a 70% scholarship for maintaining a CGPA of 9.0+, selected among top-performing students.
- **Coding Milestones:** Solved over 500 complex coding problems on **LeetCode**, earning multiple badges for excellence.
- **Certifications:** Earned advanced certifications in Python, Machine Learning, and Data Structures from Coursera, achieving 95% in Python, 98% in Machine Learning, and 94% in Data Structures, demonstrating expertise and distinction in programming and machine learning algorithms.