Astitva Veer Garg

Chennai, Tamil Nadu • +91 63976 91188 • gargveerastitva@gmail.com • linkedin.com/in/astitva-veer-garg

ML Engineer

As an undergrad student with a good knowledge of coding and a deep interest in the endless possibilities of technology, I have a good command of neural networks and generative adversarial networks through which I was able to enhance image resolution of multiple images by around 20% using SRGAN, along with optimisation of CNN model size, and reducing deployment time. Eager to contribute my skills to real projects, I am committed to expanding my horizons in both technical and research fields.

EDUCATION

B-Tech in Computer Science, Specialisation in AI and ML in Computer Science

SRM Institute of Science and Technology, KTR • GPA: 9.50   Chennai • October 2021 - August 2025

Intermediate (Class 12th)

Shiv Jyoti International School, Kota • GPA: 9.26   Kota • April 2019 - August 2021

WORK EXPERIENCE

DRDO, Ministry of Defence, Govt. of India   Dehradun, Uttarakhand, India

Artificial Intelligence Developer • Internship   **June 2023 - Present**

- Utilized Super Resolution GAN (SRGAN) to enhance image resolution by 20%, leading to improved visual clarity and detail in specific defense scenarios.
- Implemented Feature Mapping Algorithms, resulting in an improvement in image stitching and high-speed movement detection, effectively enhancing the multi-modal pipeline system.
- Enhanced the efficiency of development by comparing new deep learning models and classical deep learning architecture models, leading to a more streamlined multi-modal pipeline.

Samsung R&D Institute India   Chennai, Tamil Nadu, India · Remote

Deep Learning Research Developer • Internship   **February 2023 - December 2023**

- Enhanced image analysis capabilities by creating an innovative CNN Model, enabling the accurate identification and distinction of Points of Interests and Patterns, ultimately optimizing image processing workflows.
- Decreased model size from 250MB to 3.44MB through optimization techniques, enabling efficient use in smartphones and improving overall performance.
- Performed data mining and statistical analysis on a dataset of 5000+ image records, leading to actionable insights for improving operational efficiency.
- Received the Certificate of Excellence from Samsung Research Institute, India for my work on the given problem and got an Internship as a Samsung MAGPIE'24 Intern in Bangalore.

F13 Technologies   Delhi, India

AWS Cloud Developer • Internship   **May 2022 - July 2022**

- Enhanced application deployment process by implementing AWS cloud technologies, resulting in a reduction in deployment time and improved overall application performance.
- Engaged with cross-functional cloud team members to drive seamless project execution, leading to enhanced teamwork and successful project outcomes.
- Worked with multiple AWS services to set up and develop the migration technologies for localised server users.

SKILLS

- **Languages:** C, C++, CSS, HTML, Java, Matlab, Python
- **Frameworks/Libraries:** Fast-API, Flask, Keras, Mongo-DB, Node JS, PyTorch, Qiskit, Rest-API, Scikit-Learn, TensorFlow
- **Developer Tools:** Amazon Web Services (AWS), Cloud Computing, Git, Google Cloud Platform (GCP), MongoDB Compass, Postman

- **Soft Skills:** Brand Management, Business Strategy, Corporate Communications, Decision-Making, Leadership, Project Management

PROJECTS

AIDefenceNet
- Implemented Random Forest with an accuracy of 95.6% and Support Vector Machines with 93.3% accuracy.
- Worked on a huge dataset of around 9 Lakh records and with 85 distinguished and inclusive features.
- The project aims to detect the vulnerabilities in the networks inclusive routers, gateways and other network devices using AI/ML without using Indicators of Compromise.

Sehyog
- Developed a full-stack web application using Flask serving a REST API with React as the front-end
- Implemented a Disease Detection Model using Naive Bayer's Algorithm on a vast data set for improved accuracy
- Designed and Developed a Medicare ecosystem for hospitals, doctors and patients.

Object Detection By Faster RCNN
- Implementing Faster R-CNN object detection required a strong understanding of deep learning concepts such as convolutional neural networks (CNNs), object detection algorithms, and loss functions.
- Created the large dataset for the object detection system, and preprocessed the data

CERTIFICATIONS

Getting Started with AI on Jetson Nano
NVIDIA

Building Transformer-Based Natural Language Processing Applications
NVIDIA

Certificate of Participation in Final Call for Submissions of Py.Hack '22: Enhancing productivity, One program at a time
Unstop

Certificate of Participation in First Preliminary Round: Online Coding of Optum Stratethon: E-Track
Unstop

AWARDS & SCHOLARSHIPS

Certificate of Excellence   December 2023
Samsung Research Institute, India (SRI-B)

Unstop World Competitive Leader TOP 70 Nominee   September 2023
Unstop

VOLUNTEERING & LEADERSHIP

Quantum Computing Club, SRM   April 2023 - Present
President   Chennai, Tamil Nadu

Next-Tech Lab   May 2022 - Present
Research LAB Member   Chennai, Tamil Nadu

TPHxSRMIST   May 2022 - Present
Board Member as Head of Corporate Stratergy   Chennai, Tamil Nadu