

Manav Garg

BACHELORS OF TECHNOLOGY, COMPUTER SCIENCE ENGINEERING

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BIOGRAPHY

Manav is a 21-year-old aspiring software developer and machine learning engineer. He is proficient in a variety of programming languages and technologies. He is also familiar with NLP, computer vision, data mining, and big data analytics. He is a highly motivated and results-oriented individual who is always willing to help others.

EDUCATION

Vellore Institute Of Technology, Chennai

B.Tech. Computer Science Engineering

Specializing in: Artificial Intelligence and Machine Learning

June 2025

Current CGPA: 8.51/10.0

COURSEWORK

Courses: Object-Oriented Programming, Data Structures & Algorithms, Machine Learning, Artificial Intelligence, XAI, Linear Algebra, Calculus, Physics, Probability & Statistics

EXPERIENCE

IHX Pvt. Ltd - A Perfios Company

Intern, Data Scientist

Jan. 2025 – Present

- Worked on tariff digitization initiatives.
- Wrote python package libraries for internal development as well as for production environment.
- Led comprehensive data mining, preparation, and cleansing processes.
- Developed and trained custom model architectures, including but not limited to YOLO, Donut, and Custom Encoder-Decoder Models, as well as using RAG + LLM based pipelines.
- Reduced data processing time from 24-36 hours to 4-5 hours using pre processing and post processing techniques and finely constructed datasets.
- Implemented robust backend APIs and deployment engines enabling scalable production deployment of machine learning solutions.
- Introduced asynchronous processing to help APIs scale in production environment and to handle & withstand huge amount of traffic to drastically reduce the risk of downtime.

Intel Corporation

Intel Unnati Industrial Trainee

Focusing on an intriguing problem statement: "Business Contract Validation" which involves

May. 2024 – Aug. 2024

- Classifying content within the Contract clauses.
- Determining deviations from Templates and highlight them.
- Provide accurate metrics for analysis.
- Utilized event driven pipelines and vision language models, to extract information with pre processing and post processing steps to filter and clean the data.
- Utilized semantic rich embeddings to extract useful information which then was used to detect fraud, reading between the fine print and to validate a contract.

Tisac pvt. ltd.

Intern, Full Stack Developer & ML Engineer

Involved in developing a Full Stack Application for Training LLMs, FineTune Models, Data Analytics and more on self hosted VMs using docker technology to create isolated jupyter environments for every training job which involves the following tasks

May. 2024 – June. 2024

- Configured and administered cron jobs for streamlined task automation.
- Executed custom domain configurations for all API endpoints
- Established and managed reverse proxy setups to improve security and performance
- Deployed Jupyter Docker Lab environments for enterprise-grade data science applications
- Incorporated Firebase Authentication for secure and reliable user authentication
- Developed an advanced Docker API service for automating the creation of Jupyter Docker containers for enterprise model training
- Designed custom scripts to automatically assign secure TLS/SSL HTTPS subdomains to each container
- Ensured secure and efficient data storage solutions using MongoDB

- Part of **StudioX – The Coca Cola Company** project.
- Involved in developing a Full Stack Application for ICC World Cup 2023 Thums Up campaign to successfully log live votes, and Code Redemption as well live Polling.
- Developed and optimized Frontend for streamlined and production ready environment
- Developed and tested backend APIs developed using C# and .NET framework.

Wipro

Aug. 2023 – Nov. 2023

Intern, Android Developer & Machine Learning

Contributed to the development of an android application utilizing machine learning for monitoring objects within the pathway obstructing the passage for their rovers and machines to move on. Part of the Wipro Infrastructure Engineering Department.

SKILLS

Languages: C/C++, Python, Java, JavaScript/TypeScript, HTML5/CSS3, Dart, SQL, Bash, LaTeX

Tools: Git/GitHub, Docker, Unix, PyCharm, Visual Studio Code, Vim, Adobe Photoshop/Illustrator, MongoDB, NoSQL Platforms, Vercel, Figma

Frameworks: ReactJS/NextJS/Express, Django/Flask/FastAPI, Node.js, WordPress, Material-UI

Libraries: Pandas, NumPy, Matplotlib, PyTorch, TensorFlow, OpenCV

Area of Expertise: ML-OPS, DevOPS, Full Stack Engineering, Data Analytics

PROJECTS

LuminSkin: Skin Cancer Classification using Vision Transformers | *Python, PyTorch, ML/AI* Oct-Nov. 2024

- Achieving state-of-the-art performance in skin cancer classification, this project advances the capabilities of medical imaging analysis, providing enhanced tools for early detection and treatment. The approach leverages evaluation metrics such as classification accuracy to validate its effectiveness compared to existing methods. Additionally, this study compares the performance of two Vision Transformer models: the standard ViT and the DeepViT.
- [LinkedIn](#) · [Github](#)

Satellite Image Analysis using Vision Transformers | *Python, PyTorch, Machine Learning/AI* April-May. 2024

- Achieving SOTA in land use classification. This project contributes to advancing satellite image analysis and enhances tools for environmental monitoring, urban planning, and land management. This uses evaluation technique based on metrics like classification accuracy that proves the efficacy of the suggested approach with reference to existent methods. This project also compares two Vision Transformer models, the base ViT and the CCT (Compact Convolutional Transformer) model.
- [LinkedIn](#) · [Github](#)

KeyKeg - Password Wizard | *Python, Scikit-Learn, Machine Learning, NextJS, Web App* April. 2024

- Developed a Secure, Strong, and Smart, ultimate password management app that securely stores your passwords, generates strong and unique passwords, and utilizes machine learning approach (Random Forest Algorithm) to analyze and classify password strength.
- [LinkedIn](#) · [Github](#)

Fixed Point Adherence – Wipro | *Python, TensorFlow, Machine Learning, Flutter, Android Dev* July-Sept. 2023

- Developed an App for Wipro with Machine Vision capabilities to distinguish items on a pathway so that they can be removed and status can be logged.
- [LinkedIn](#) · [Github](#)

SentiSYS: CLI Sentiment Analysis | *Python, TensorFlow, Machine Learning, Git, Unix Shell, VS Code* July. 2023

- SentiSYS is a real-time sentiment analysis tool that utilizes EmoRoBERTa, a pre-trained transformer-based model, to perform sentiment analysis on both text and speech inputs.
- [Github](#)

NSCHR, A Web HMIS Portal | *Express, Embedded JS, MongoDB, CSS3, Git, Unix Shell, VS Code* Sept. 2021

- A Web app built using various technologies to provide fast, accurate information about a patient right in front of Medical Practitioner in just a matter of few clicks!
- [Github](#)