



Sagar Kumar Indra Jha
Bachelor of Technology
in Computer Science Engineering
Amity University, Mumbai

+91-9167484521
sagarjha0999@gmail.com
GitHub
LinkedIn

SUMMARY

An enthusiastic and motivated computer science engineering student seeking an ML Internship role within Tower Research Capital’s Core AI Machine Learning team. With a strong foundation in computer science fundamentals and a passion for advancing machine learning technologies, I am enthusiastic about contributing to Tower Research Capital’s high-frequency trading strategies. Ready to immerse myself in the dynamic environment of quantitative trading, I am committed to leveraging innovative solutions and expertise to propel the firm’s success in Gurgaon.

EDUCATION

Degree	Institute	CGPA/Percentage	Year
B.Tech CSE	Amity University, Mumbai	8.37 (Till 5th Sem)	2021-2025
Senior Secondary	Jaipuriar School (CBSE)	95.2%	2020-2021
Matriculation	Jaipuriar School (CBSE)	93.4% (Best 5)	2018-2019

EXPERIENCE

- IEEE Bombay Section Internship in collaboration with Alhansat Solutions** *September 2023 - October 2023*
Software Development Intern *Mumbai*
 - Led the development of the Text-to-Speech module, demonstrating advanced problem-solving skills and contributing to a 15 percent enhancement in product quality.improvement in product quality.
 - Collaborated with a diverse team, adapting to new challenges and technologies in a dynamic environment. 24 percent increase in adaptability to new challenges and technologies.
 - Applied engineering principles to enhance functionality, aligning with Tower Research Capital’s focus on innovative solution.

PROJECTS

Solar Wind Magnitude Prediction with Machine Learning

ML Project

- Developed a machine learning model using HistGradientRegressor and Random Forest, to predict solar wind magnitude based on historical data, significantly contributing to space weather forecasting.
- Implemented a user-friendly GUI with Flask for real-time prediction of solar wind magnitude, providing enhanced accessibility for researchers and space agencies.

House Price Prediction Model

ML Project

- Developed a machine learning model using HistGradientRegressor and to predict house prices in Boston, leveraging historical data and various features for accurate forecasting.
- Implemented a user-friendly GUI with Flask, enabling real-time input of housing features and obtaining predictions, facilitating informed decision-making for real estate investments.

Heart Disease Prediction Model using ANFIS

ANN Project

- Developed an ANFIS-based model for heart disease prediction, utilizing medical data and the ANFIS algorithm to accurately assess the likelihood of occurrence.
- Conducted rigorous testing and validation to ensure the model’s reliability and diagnostic accuracy.

Analyzing Movie Posters with Machine Learning

ML Project

- Developed a machine learning pipeline to analyze and classify movie posters based on visual features.
- Utilized VGG16 CNN for feature extraction and SVM for classification, contributing to automated genre classification systems.

Pincode Serviceability Verification Web Application

Sparse matrix

- Designed and developed a web application for efficient pincode serviceability verification using sparse matrix techniques.
- Leveraged sparse matrix representations to optimize memory usage and data processing speed, especially for sparse datasets.

TECHNICAL SKILLS

- **Programming Languages:** Proficient in C++ and Python. Familiar with C, Golang, Bash, R, and JavaScript.
- **Tools and Software:** Experienced with Linux, CI/CD, MLOps, Kubernetes, AWS, Git, Docker, and Jupyter.
- **Libraries:** Familiar with NumPy, PyTorch, Matplotlib, Pandas, TensorFlow, Keras, Z3Py, and OpenCV.
- **Web Development:** Familiar with SQL, HTML, CSS, ReactJS, Bootstrap, Flask, Django, and MongoDB.

KEY COURSE TAKEN

- Data Structures and Algorithms, Object-Oriented Programming, Software Engineering.
- Python Programming, Computer Networks, Operating System.
- Database Management System, Computer Graphics

CERTIFICATIONS

- Certified by open weaver for completion HTML course.
- Successfully participated in ‘EducateHacks 2023’ organised by United Latino Students Assocation and contributed by part for betterment of global learning experiences.
- Certified by Open Wever for completion of Javascript Course.
- Certified by Udemy for completion of Fullstack Developer course

POSITIONS OF RESPONSIBILITY

- **Active Contributor**
*Engaged in 20+ discussions, providing valuable suggestions, showcasing commitment and a growth mindset.*Career Village (Online Platform)
- **Founder and Organizer**
Initiated and led an online Data Structures and Algorithms community, promoting collaborative learning. (DSA Enthusiastics Hub)

MISCELLANEOUS

Ranked 5th in GFG Institute Rank for exceptional performance and dedication	March 2024
Honorary mention in Bengaluru Open mobility challenge 2023	May 2023
Actively participated in GNEC Hackathon	July 2023
Prize winner at Eduhack hackathon	July 2023
Awarded Dr. Ashok K. Chauhan 100 percent Merit Scholarship	September 2021