

# RAGHAV SRIVASTAVA

mr.tachyon25@gmail.com | +91 9818334567 | New Delhi

[Linkedin](#) | [GitHub](#) | [Portfolio](#) | [Blog](#)

## EDUCATION

### IILM College of Engineering & Technology

B.Tech Computer Science & Engineering

Greater Noida, India

2021 - 2025

### Nehru World School

AISSCE

CGPA: 9.57

Ghaziabad, India

2018 - 2020

### Delhi Public School Rajnagar

AISSEE

CGPA: 10

Ghaziabad, India

2011 - 2018

## EXPERIENCE

### Tara Capital Partners Pvt. Ltd. | Quant Research Intern

Delhi | Oct 2023 - Present

Research and analysis of the commodities markets, including the development of quantitative models to evaluate market dynamics, price movements, and risk factors.

Advanced statistical and mathematical techniques to build robust quantitative models that enhanced the understanding of commodity market behavior, aiding in the development of data-driven trading strategies.

### StockBrain | Founder

Delhi | Jan 2023 - Sept 2023

Developing state of the art algorithms which incorporate Machine Learning, Mathematical Finance, Quantum Computing and Game Theory, etc.

### AlgoAnalytics | Quant Intern

Remote | May 2023 - July 2023

Developing algorithmic trading strategies that incorporate sentiment analysis of Twitter data as an additional feature alongside numerical data for stocks. By leveraging Transformers and other autoregressive sequence models, with classical ML models like Random Forest, this will provide insights into the public sentiment towards specific stocks, enabling more informed trading decisions.

### IIT Jodhpur | Research Intern

Remote | May 2023 - July 2023

Developing a state of the art cognitive model to simulate human curiosity, refine the current approaches to Reinforcement Learning.

### Pace Stock Broking Services Pvt. Ltd. | Quant Intern

Delhi | Dec 2022 - Feb 2023

Automating the login process to receive access tokens from XTS & Zerodha, using their APIs, and Notifying the user via Telegram in case of any login errors.

Working with tick data, mining data, retrieving real time tick data from websockets, working with databases (SQLite, MongoDB), developing strategies for trading.

Developing Algorithmic Trading strategies and backtesting them prior to deployment.

## SKILLS

Programming Languages: Python, SQL, C++, C#, C, MATLAB.

Libraries/Frameworks: Scikit-Learn, Tensorflow, Keras, NumPy, Pandas, Matplotlib, Qiskit, Penny-lane.ai, XGBoost, Hugging Face, Socket.io, NLTK, Scipy, LangChain

Tools / Platforms: Git, Linux, Flask, Streamlit, Gradio, ChatGPT, Notion, MS Excel

Databases: PostgreSQL, SQLite, MongoDB, Chroma DB, FAISS

## PROJECTS / OPEN-SOURCE

### Yoda-AI | [Link](#)

*Python, Langchain, FAISS, Hugging Face, SERP API, Beautiful Soup, Llama 2*

- An interactive AI system named "Yoda AI."
- It utilizes Language Learning Models (LLMs) like GPT-4, Llama, and Hugging Face models in conjunction with vector databases like Chroma and FAISS.
- The code demonstrates various features, including document-based conversational interfaces, dynamic web searches, and interactive GPT-based chatbots.

This project highlights the application of cutting-edge NLP technologies and Gen-AI tools to create versatile, context-aware solutions.

#### **Websocket to DB | Link**

*Python, Websocket, SQLite*

Real time retrieval and storage of data from zerodha, XTS websocket to sqlite database, using DBEaver for querying the database and GUI.

#### **Meta Stock Price Prediction | Link**

*-Tensorflow, Keras, Scikit-Learn, Pandas, NumPy, Matplotlib, Seaborn*

META Stock price prediction, a univariate time series forecasting using an LSTM Neural Network.

#### **Sentiment-Analysis-of-Tweets-Predicting-and-Visualizing-Public-Opinion | Link**

*Jupyter Notebook*

This is a project which focuses on analyzing the sentiment of tweets to gain insights into public opinion.

#### **Login automation/ Access Token retrieval | Link**

*Python, rest API, Websocket, Telegram, Google Sheets*

Zerodha, XTS login access token automation.

#### **Algorithmic Trading Backtesting Strategies | Link**

*Python, Numpy, Pandas*

Backtesting strategies for algorithmic trading.

#### **Neural Machine Translation | Link**

*Tensorflow, Keras, NumPy*

Translating Sentences from the original language to target language using SOTA architectures : Seq2Seq model, Transformer model.

#### **Bank Fraud Detection | Link**

*Pandas, Scikit-Learn, NumPy, Matplotlib*

The model predicts Fraud transactions and aims to prevent transfers from one account to another and flags illegal attempts.

#### **Liver Disease Prediction | Link**

*Scikit-Learn, Pandas, NumPy*

A classification problem which involves predicting if a patient has liver disease or not, on The Indian Liver Patient dataset using different classification algorithms in Scikit-Learn which include LogisticRegression, DecisionTreeClassifier, KNN, and ensemble models: RandomForestClassifier, VotingClassifier.

### **CERTIFICATIONS**

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- Advanced SQL - **Kaggle**
- Neural Machine Translation - **Datacamp**
- Tensorflow & PyTorch on AWS - **AWS**
- Text Classification Model with AWS Glue and Amazon SageMaker - **AWS**
- SQL - **HackerRank**
- Supervised Learning with Scikit-Learn - **Datacamp**
- Unsupervised Learning in Python - **Datacamp**
- Python - **Kaggle**
- Intro to Machine Learning - **Kaggle**
- Advanced Software Engineering Virtual Experience Program - **Walmart Global Tech**

### **HONORS & AWARDS**

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- Selected as the Google Developer Student Club Lead at IILM university (2023-24)
- Secured First rank (Twice) in national level vedic maths competition organized by Aadhar Mathemagic.
- Fireball Award for being the fastest and the most accurate performer in National level Math quiz.
- Academic Scholarship issued by IILM CET, granting 40% tuition fee waiver.
- Scholar award with full tuition fee waiver for the complete academic year issued by Nehru World School.