

# VS Chaitanya Madduri



**Date and place of birth:** 25.06.1993 in Kakinada, India

**Visa status:** Job Seeker Visa for Full time

**Citizenship:** Indian

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**Github:** <https://github.com/Chaitanya2593>

**Tableau:** [mvs.chaitanya \(Tableau Public\)](#)

## EDUCATION

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09/2021 – 07/2023

**Frankfurt School of Finance & Management, Frankfurt a.M.**

*Master in Applied Data Sciences (M.Sc.)*

- Master Thesis: Identifying Covenant Violations and Amendments from SEC filings using NLP. (Grade: 1.0).
- Final grade: 1.5 (with 1.0 being the best)

08/2011 – 04/2015

**VR Siddhartha Engineering College, Vijayawada, India**

*Bachelor in Electrical and Electronics Engineering (B.Tech.)*

- Final grade: 8.73/10.0 (with 10.0 being the best)

## WORK EXPERIENCE

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**Frankfurt School of Finance & Management , Frankfurt am Main, Germany** 03/2023 – 12/2023

*Research Assistant - Data Science (Full-time), FS Research Lab*

- Extracted and organized covenant information from 1.8 million SEC files and manually tagged filing text using Open AI GPT3.5 and developed an NLP based Text classification model to classify the violations and performed empirical analysis on the results.
- Built NLP-based Topic Modeling and sentiment for calculating the Attention score for WSJ news topics to estimate the company's news attention on a daily basis.

**Clearstream AG (Deutsche Börse Group), Frankfurt am Main, Germany** 05/2022 – 04/2023

*Data Scientist Working Student, Data management*

- Automated the Geographical Distribution report using Databricks which reduced 90% of the manual process and helped the company to generate ~4 million additional revenues
- Built a collateral concentration breach prediction model from European countries' data and helped the Risk team to identify potential risks
- Created Power BI dashboards for the corporate actions and collateral concentration optimization use cases to provide actionable insights
- Worked on PoC to generate Credit Reports using NLP language generation by utilizing the compliant language models. This might potentially reduce 30 working hours per month

**Exaloan AG, Frankfurt am Main, Germany**

11/2021 – 05/2022

*Software Developer Working Student, Development team*

- Coordinated with the lending platform for the creation of machine learning models to identify the defaulters from the 0.3 million different Consumer and SME loans and deployed the models using AWS
- The models helped the investors and Lending platform to understand the risky consumers and SMEs based on default probability and loan rating
- Automated analytics calculations and plugged the data into the Power BI reporting tool.

**Clean Harbors, Hyderabad, India**

12/2020 - 07/2021

*Senior Data Scientist Full Time, Data Science Team*

- Tasked with developing and deploying machine learning models for classification, and with finding an efficient way to extract waste profile details
- Used Azure form recognizer for extracting the waste profile details from scanned copies and saved manual efforts by 55% while maintaining 80% accuracy

**Tech Mahindra, Hyderabad, India**

05/2019 - 11/2020

*Data Scientist Full Time, FICO Team*

- Modeled AI predicting Suspicious Journal Entries and Fraudulent NON-PO Payments for Nestle Financial division.
- Created the NLP extraction pipeline on around 60,000 laboratory reports across 15 different styles, using Python, spacy, regex and OpenCV for both scanned and native report formats. Continuously improving based on client feedback
- Designed Front end UI using the Django framework concepts for providing a web interface for users and used Azure SQL server for backend operations
- Developed and deployed an Incident management tool, which auto prioritizes the tickets based on the criteria and test keywords using machine learning and text classification.

**Tech Mahindra, Barcelona, Spain & Bangalore India**

08/2015 – 05/2019

*Full-Time Agile Test Automation engineer, Nestle CMT & Nespresso Testing team*

- Designed synthetic customer data generator and automated test cases to validate Salesforce Service and Marketing Cloud using python selenium and Xray tools
- Automated API calls using Python Requests and used Selenium for web automation
- Customized Robot Automation framework for a current project and created the utilities functions from scratch
- Built and leverage modular and re-usable components for the UFT-based BPT Automation framework

**STUDENT PROJECTS**

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**Co-operate Company Project**

09/2022 – 02/2023

*Frankfurt School*

- Machine learning-based portfolio construction in cryptocurrency to enable better investment decisions of customers of Crypto Matter for 100 different currencies
- Used basic models like OLS, SVC, XGboost and advanced models like LSTM, LGBM, transformers, and stacking approaches to attain optimal results. Finally, Attained out-of-sample RMSE reached 0.05, and portfolio alpha reached 0.6% on a weekly basis

**Crypto Time series modelling**

11/2022

*Frankfurt School*

- Time series modeling to predict future return of cryptocurrencies, models include: ARIMA, fine-tuned random forest, LGBM, XGB and LSTM, out-of-sample RMSE reached 0.04

**Presidential Tweets Influence on Crypto Prices**

03/2022

*Frankfurt School*

- Mined Twitter from President Bukele and bitcoin data. Performed sentiment analysis on twitter data understand the overall reaction
- Used regression analysis to understand the key significance of the tweets over the prices

**Restructuring Strategy Recommendations**

10/2022

*Frankfurt School*

- Extracted SEC 10-K filings for Charah company and analyzed restructuring keywords using the NLP tools.
- Scrapped and performed sentiment analysis on Charah's employee feedback to understand over employees satisfaction and highlight the key issues.

**SKILLS**

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**Programming:**

Python &amp; GitHub (Advanced), C++&amp;R (Beginner), SQL &amp; NOSQL

**Machine Learning Libraries:**

Numpy, Pandas, NLTK, Gensim, Spacy, Pyspark, PyTorch, Hugging face, LangChain, TensorFlow, CUDA, Selenium, Regex, &amp; Open CV

**Concepts:**

Deep Learning, NLP, Reinforcement Learning, Supervised and Unsupervised learning, Time Series Forecasting, Azure Cloud Services.

**Languages:**

English (Fluent), German (Beginner)

**CERTIFICATIONS**

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01/2022

Introduction to Financial Accounting from Coursera

01/2021

Computer Vision with OpenCv from Udemy

05/2020

Microsoft Azure Data Scientist Associate (DP-100)

**EXTRACURRICULAR ACTIVITIES**

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09/2021 – 04/2023

FS Data Science (Organizing events and facilitating Workshops)

09/2021 – 09/2022

FS Model United Nations (Member), FS Charity (Volunteer)

**INTERESTS**

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- Travelling (self-organized backpacking trips), Hiking and Archery.



VS Chaitanya Madduri (Frankfurt am Main, 22.09.2023)