SOHAM BHATTACHARYA

Research Intern, Indian Statistical Institute Kolkata M.Sc. in Big Data Analytics, RKMVERI Belur

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PROJECTS

• Multimodal Sentiment Analysis

Jun.'25 - present, ISI Kolkata

Description: Novel perspective on multimodal sentiment analysis through underutilized yet emotionally rich cues in real-world media **Keywords:** Sentiment Analysis

K8sCIFAR

Jan.'25 - Apr.'25, RKMVERI

Description: Demonstrated distributed data parallelism on CIFAR-10 using Kubernetes

Tools: PyTorch, Kubernetes, Docker

• Raag Sense

Jan.'25 - Apr.'25, RKMVERI

Description: A pioneering DL-based system for raga recognition in Indian Classical Music (ICM), setting a new benchmark

Keywords: Data curation, ICM-aware feature extraction, MFCC, CNN

ChessLens

Jan.'25 - Apr.'25, RKMVERI

Description: A cost-effective, vision-based system for accurate chess piece tracking and board digitization, poised to be a potential alternative to DGT chessboards

Keywords: open-cv, comprehensive EDA, occupancy detector

· Rhythms of the Mind

Aug.'24 - Nov.'24, RKMVERI

Description: An intelligent system that analyzes music consumption patterns to detect changes in mental health, supporting personalized music therapy

Keywords: Python, Kaggle, EDA, Feature engineering, fine-tuning

Savoring Sentiments

Jan.'24 - Apr.'24, IIT Madras

Description: An ML model that predicts restaurant's recipe ratings by analyzing user reviews and key engagement metrics, combining textual sentiment with numerical insights.

Keywords: EDA, TF-IDF Vectorizer, LightGBM

COURSEWORK

RKMVERI Belur:

Deep Learning • Natural Language Processing • Computer Vision

- \bullet Artificial Intelligence \bullet Time Series Forecasting \bullet Survival Analysis
- Machine Learning Statistics Java & Hadoop Econometrics
- Finance Reinforcement Learning DL in Cyber Security

Indian Institute of Technology Madras:

Programming in Python • Machine Learning • Tools in Data Science

• Business Data Management • Business Analytics • Statistics

ACCOMPLISHMENTS

Badges earned: Introduction to GenAl (Google Cloud), Machine Learning Foundations (AWS Educate) (Aug.'25)

Udacity: Introducing Generative AI with AWS

(Aug.'25)

- Attended Crest Crypto Summer School 2025, TCG Crest (June 2025)
- NPTEL Workshop: Time Series Forecasting using LSTM and ARIMA

• Topper in courses: Statistics, Data Structures & Algorithms (RKMVERI)

Tools in Data Science, Programming in Python (IIT Madras)

- Coursera: Automation & Advanced Techniques with Copilot in Excel by Microsoft (Jul.'25), Introduction to Machine Learning on AWS (Feb.'25), Google Crash Course in Python (Sept.'22)
- NPTEL: Competitive Programming

(Nov.'24)

• Google: Google Analytics Individual Qualification

(Jul.'24)

EXPERIENCE

Research Intern

Jun.'25 - present

ISI, Kolkata

Advisor- Dr. Umapada Pal & Dr. Ali Reza Alaei

EDUCATION

 Ramakrishna Mission Vivekananda Educational and Research Institute (RKMVERI), Belur, Howrah

M.Sc. in Big Data Analytics

(Rank: 5/27)

2024 - Present

(Sem-1) CGPA: 7.87

· Indian Institute of Technology Madras

Diploma in Data Science

= 2021 - 2024

CGPA: 8.54

• St. Xavier's College Kolkata

B.Sc.(H) in Mathematics

i 2021 - 2024

CGPA: 6.72

Don Bosco School Liluah

Indian School Certificate (10+2)

= 2019 - 2021

Score: 94.25%

Indian Certificate for Secondary Education (10)

2008 - 2019

Score: 90%

TECHNICAL SKILLS

- Programming Languages: Python, Java, SQL, C, C++, ŁTFX, HTML, CSS
- Frameworks: PySpark, Hadoop, Pregel
- Databases: MySQL, Neo4i
- Tools: R, Docker, Git/Github, MS Excel, Google Analytics, AWS, QGIS, Geopandas, Google Data Studio, Flourish, Tableau, Kumu, Power BI

LEADERSHIP POSITIONS

- RKMVERI
 - Placement Coordinator [May'25 Present]
 - Organizing Committee Member, Perceptron 2025 (annual departmental tech fest)
 [Jan.'25]
 - Class Representative [Jul.'24 Present]
- IIT Madras
 - Group Leader, Student Council IITM BS [Aug.'23 - Aug.'24]