

# Rishika Sen

Data Scientist III, Ericsson, Bangalore

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## Contact:

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## Work Experience

**Ericsson**, Data Scientist III (July, 2024 onwards), Data Scientist II (March, 2022 to June, 2024). Contributions:

- EEA chatbot: extended existing chatbot to incorporate amazon claude with fewshot prompting
- Trustworthy AI: Developed automated compliance detection system for AI systems to adhere to trustworthy AI guidelines.
- Explainable AI: have worked with various explainable techniques like SHAP, LIME, etc. Contributed in the development of an in-house python package for application of explainability on various data.
- Anomaly detection: anomaly detection on time series telecom data, eventually bringing new business to the company.

**Syngene International**, Research Investigator. Feb 2021-Feb, 2022. Contributions:

- QSPR modeling and prediction: Clients successfully predicting physicochemical properties at various temperatures using the regression models built. Prediction of branching positions and branch counts of various chemical compounds based on their mass spectra.
- Distance based text clustering: Clustering of chemical terms and phrases based on text similarity.

## Education

**PhD, Computer Science** [2014 – 2021] Indian Statistical Institute, Kolkata.

Thesis title: In silico Identification of Toxins and Their Effect on Host Pathways: Feature Extraction, Classification and Pathway Prediction

**MSc, Computer Science** [2012 – 2014] University of Calcutta, Kolkata. University rank 9, 75.8%.

**BSc, Computer Science** [2009 – 2012] University of Calcutta, Kolkata. University rank 6, 74.6%.

## Journal publications

- **Rishika Sen**, S. Tagore, R. K. De. "Cluster Quality based Non-Reductional (CQNR) oversampling technique and Effector Protein Predictor based on 3D structure (EPP3D) of proteins." *Computers in Biology and Medicine*.
- **Rishika Sen**, S. Tagore, R. K. De. "ASAPP: Architectural Similarity-based Automated Pathway Prediction System and its Application in Host-Pathogen Interactions." *IEEE/ACM Transactions on Computational Biology and Bioinformatics*.

A full list of publications and posters is on my [website](#).

## Skills

### ML techniques:

Explainable AI, Trustworthy AI, Anomaly Detection, Clustering, Regression, Classification, Predictive modeling, EDA, Data visualization, Predictive analysis.

### Languages:

Python, Matlab, SQL.

### Python packages:

keras, sklearn, tensorflow, pandas, numpy, matplotlib, seaborn

### Proficient in:

English, Bengali, Hindi.

### Online resources:

[Github](#), [Google Scholar](#), [LinkedIn](#)

## Coursework

**PhD:** Neural networks, Pattern recognition, Data Structures, Computer Organization, Database Management Systems, Operating Systems.

**MSc:** Soft computing, Computer Architecture, Data Communications, Computer Networks, Design and Analysis of Algorithms, Computer Graphics and Image Processing, Software Engineering, Object oriented Systems, Automata Theory and Compiler Design, Information Security.