

# Rishikesh Ajay Ksheersagar

Ann Arbor, MI | +1(734)489-2596 | [rishiksh@umich.edu](mailto:rishiksh@umich.edu) | <https://www.linkedin.com/in/rishikeshksheersagar/> | <https://github.com/rishiksh20>

## PROFILE

**Data Science professional with over 4.5 years of experience** across Retail, Telecom and Healthcare verticals.

- *Skills:* Natural Language Processing, Machine Learning, Deep Learning, Statistical Analysis, Agent Based Models, Reinforcement Learning
- *Languages:* Python (Pandas, Dask, NumPy, ScikitLearn, Tensorflow, PyTorch, Keras, NLTK), SQL, R, PySpark, Java, C/C++
- *Tools / Platforms:* Snowflake, Hadoop, GCP, AWS, Jenkins, Tableau, PowerBI

## EDUCATION

**University of Michigan - Ann Arbor**

*Masters in Data Science, GPA 4.0/4.0*

Subjects: EECS 595 (NLP), EECS 545 (ML), STATS 503 (Multivariate Analysis), STATS 510 (Probability Distributions)

**August 2023 – May 2025**

**Ann Arbor, MI**

**Savitribai Phule Pune University**

*Bachelor of Engineering in Computer Engineering*

**June 2015 – June 2019**

**Pune, India**

## PROFESSIONAL EXPERIENCE

**MU SIGMA INC.**

**Data Science Manager** (*August 2022 - June 2023*)

**July 2019 - June 2023**

**Bangalore, India**

- Managed 2 teams consisting of 16 data scientists working with Fortune-100 clients in Telecom and Healthcare domains, spearheaded the growth and management of engagements generating \$1.5M annually.
- Engineered and implemented an advanced unbalanced multi-class classifier using RxMER data, stacking XGBoost and sequential Neural Network models, resulting in a remarkable 45% decrease in probable outages by precisely identifying causation of Modem Network Impairments in near real-time.
- Developed a PoC tool to simulate Patient Journeys in Clinical Trial by integrating Therapeutic Area, Site, PI, Patient, and Trial attributes, utilizing Bayesian Networks & Agent-Based Models to achieve 79% similarity with previous trials and enabling proactive planning and mid-trial adjustments for Phase 3 Clinical Trials.
- Drove RFP connects with CXOs of 2 Fortune-100 Telecom clients for adding new engagements to Mu Sigma's portfolio successfully.

**Decision Scientist** (*July 2019 - July 2022*)

- Led a team of 7 data scientists in identifying key features for degraded network service for the Data Science and Data Engineering team of a Fortune-100 Telecom clientele.
- Conducted EDA on 7 datasets including Cable Modem Registration, Speed Tests, Modem Utilization, and PNM (Proactive Network Maintenance, RxMER, FEC), achieving 98.7% accuracy in detecting degraded network service events.
- Delivered a dynamic State Table for real-time monitoring of Network Outages and Downtime for ~30M cable-modems, enabling preemptive rectification of outages leading to 37% less customer complaints in comparison to the historical trends.
- Assisted the FP&A team of the world's largest home improvement retailer to plan 11 retail metrics viz. Sales, Markups, Markdowns, Inventory, among others, for upcoming fiscal halves.
- Enabled Digital Transformation by migrating a legacy Store Planning tool, reducing execution time by 60%.
- Utilized Washout 2 and 3 constraint Optimization, along with Time Series models (ARIMA) to design Financial Plans resulting in the client organization exceeding planned Gross Margin by ~2% in FY 2020-21.
- Created 7 Tableau Dashboards to provide detailed insights and flag anomalies in Financial Plans, empowering Store Managers and Region Finance Leads to meet Sales targets in 63% more instances.

**BMC SOFTWARE**

**Project Intern**

**August 2018 - April 2019**

**Pune, India**

- Worked on a PoC which involved implementation of private Blockchain with voting-based consensus mechanism by leveraging Hyperledger Composer, in addition to a traditional Structured Database, in the backend of a globally used legacy ITSM Software.

## ACADEMIC PROJECTS

- **Few-shot RLHF** (Jan 2024 - Ongoing) - Exploring preference-based reinforcement learning, aiming to reduce online feedback needs by 20× in Meta-World, advancing training of manipulation policies on real robots like the Franka Panda Robot. Implemented MAML, Reptile and designed online adaption using PEBBLE on Metaworld ML10 dataset.
- **Is it easy to be Multilingual** (Nov - Dec 2023) - Explored mBERT's transfer mechanics, emphasizing syntactic, morphological, and phonological similarities as key predictors. Displayed language model performance's critical role in cross-lingual transfer. Proposed a framework achieving 62.5% accuracy in selecting optimal source language for multilingual cross-transfer. [\[GitHub\]](#)
- **Android Malware Detection** (Jan - May 2018) - Evaluated supervised signature-based, source-code-based, and permission-based malware detection methods. Received an F-1 score of 0.93 for classification of Malware by utilizing permission flow-graphs which are generated by analyzing permissions requested by the app. [\[Report\]](#)

## HONORS AND AWARDS

- **Mu Sigma Inc.:** Received SPOT Awards on 3 occasions (Aug 2022, Aug 2021, Oct 2020) for exceeding project goals, delivering exceptional results and designing optimal solutions.
- Ranked 3rd for seminar on Android Malware Detection (May 2018).