Mayank Lal

linkedin.com/in/mayanklal07
Email: mayank.pXXXXX@iimtrichy.ac.in
Mobile: +91-9XXXXXXXXX

Education

- **Indian Institute of Management** — *Tiruchirappalli, India*
  Master of Business Administration — *June 2017 – March 2019*
- **Guru Nanak Dev Engineering College** — *Ludhiana, India*
  Bachelor of Technology in Computer Science & Engineering — *August 2010 – April 2014*

Work Experience

- **EXL Services (I) Private Limited** — *Gurugram, India*
  Senior Quantitative Risk Model Developer — *Dec. 2021 – Present*
  - **LGD Recovery Model Redevelopment:**
    - Enhanced LGD framework by incorporating payment-based settlement logic to resolve under-prediction from -45% to 8%.
    - Developed empirically derived recovery curve for non-settled accounts with piecewise exponential smoothing to better capture the full recovery lifecycle and post-final write-off recoveries.
    - Implemented a novel approach to adjust the recovery curve for stress scenarios by incorporating the impact of economic stress on rate of recovery payment to insulate it from regime shifts.
  - **Climate Risk Stress Testing:**
    - Transitioned pilot CRST framework from NGFS-based to MAS-authored climate scenarios, enhancing loss-forecasting alignment with local flood defense systems and property-value depreciation paths.
    - Developed stratified sampling methodology for new-booking under constant balance sheet assumption and implemented computational optimizations in peril-path simulation; approved for MAS submission.
  - **PD Model Benchmark Rate Transition:**
    - Implemented benchmark rate transition in mortgage PD model and amortization logic from SIBOR to SORA.
    - Re-estimated model coefficients and developed backcasting approach to extend SORA history using correlated SIBOR data, maintaining ROC (0.704) and Gini (0.409); approved for regulatory submission.
  - **Knowledge Development & Business Enablement:** Contributed to business development initiatives by creating case studies, training materials, and conducting training sessions to establish an in-house functional team for Climate Risk Stress Testing (CRST) projects.
  - **Awards:** Received *ACE Award* and *Pioneer Award (H1 2024)* for innovation and excellence in credit risk model redevelopment.
- **Larsen & Toubro Limited** — *Chennai, India*
  Data Scientist — *May 2019 – Dec. 2021*
  - **Project Financial Risk Analytics Platform:**
    - Developed ARIMA-based cost forecasting and GAM-based risk classification models using Earned Value Methodology to anticipate cost overruns across large construction projects.
    - Led integration of model outputs into a Power BI dashboard and automated reporting using R Markdown, enabling proactive project cost monitoring during alpha deployment.
  - **Safety Risk Analytics Platform:**
    - Applied NLP on safety reports and incident logs from 100+ construction sites to build an analytics ready Safety Database.
    - Developed RFM-based safety scoring model in collaboration with safety SMEs and built an MVP using R Shiny for interactive visualization and scoring of active projects.
    - Advocated adoption of open-source analytical tools across the Analytics CoE to reduce depen-

dency on proprietary software and enable rapid prototyping.

- **Vendor Risk Intelligence Dashboard:**
  - Led development of NLP-driven market intelligence platform to monitor operational risk across key vendors.
  - Built data pipeline to collect daily vendor news via private API, standardized entities using NLP, and applied VADER sentiment model to generate sentiment indices and Power BI dashboards.
  - Automated reporting of quantified value-at-risk and highlighted at-risk vendors for proactive mitigation using R Markdown.

- **Infosys Limited** *Chandigarh, India*
  Data Engineer *May 2014 – Feb. 2017*
  - **Data Engineering & Application Analytics:**
    - Designed, optimized, and maintained SQL-based data pipelines and reporting modules for manufacturing and telecom analytics systems.
    - Improved report generation runtime by 90% through query tuning, indexing, and schema optimization in MS SQL Server.
  - **Automation & Process Optimization:**
    - Developed backend automation scripts and deployment utilities that reduced manual data-handling effort and improved system reliability across multiple applications.
    - Introduced Jenkins as an open-source CI/CD alternative to IBM UrbanCode Deploy, reducing licensing costs.

Certifications

- **FRM (Financial Risk Manager)** – Level II Candidate (GARP)
- **Quantitative Analyst in R** – DataCamp (2025)
- **Practical Time Series Analysis** – The State University of New York (2021)

Technical Skills

- **Modeling & Methods:** PD, LGD, Credit Risk Stress Testing (CRST), Recovery Modeling, Forecasting, GAM, ARIMA, Time Series Analysis, Clustering, NLP
- **Programming & Tools:** R, SAS, SQL, Python, Power BI, Git, Automation Scripting, Excel, Powerpoint
- **Regulatory Frameworks:** IFRS 9, CECL, CCAR
- **Model Lifecycle & Governance:** Model Development, Back-Testing, Benchmarking, Sensitivity Analysis