



Saumitra Mazumder



SAMazumder



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About Me

Experienced in all three lines of defense. Solid knowledge of a range of quantitative finance, risk management (e.g., VaR/Expected Shortfall for market risk, credit portfolio models, stress testing), derivatives models & pricing theory, as well as relevant regulatory frameworks. Interested in the intersection of machine learning, quantitative finance, and climate change.

Thorough and analytical with demonstrated leadership experience. Excellent verbal and written communication skills. Strong ability to collaborate effectively with diverse individuals and strengthen relationships to design and achieve effective solutions.

Education

M.Sc. Applied Mathematics
Toronto Metropolitan University
(formerly Ryerson University)

2020-2022

B.Sc. Mathematics and Economics
Toronto Metropolitan University
(formerly Ryerson University)

2015-2019

Knowledge

Model Building

Climate-adjusted credit/market risk models, borrower risk rating models, generalized additive regression models, ASFR structural models, gradient boosting, Monte Carlo methods, & time series analysis.

Tools

Python (XGBoost, OpenAI API), R (Dplyr, QRM, xts, dynlm), SAS, MATLAB, \LaTeX , SQL, Java, & C++.

Recent Employment History

2023-Current PwC, LLP - Senior Associate

Corporate Financial Risk Management Advisory

Development

FRM's subject matter specialist in developing models to quantify climate risks (physical risk & transition risk). This includes development under IPCC RCP/SSP scenarios, heat map generation for physical risks, climate-related scenario analysis and climate adjusted credit/market risk parameters.

Development lead for FRM's SCSE products. Including the creation of automated engine for completing each module of the climate scenario exercise per OSFI guidance and providing advisory over future data collection requirements in view of OSFI's B-15 guidance.

FRM's subject matter expert providing advisory under various climate-related reporting frameworks.

Validation

Experience in liquidity strategy and evaluation, including: (i) cash flow & asset management, (ii) stress testing market downturns and credit freezes.

Highly proficient in validating economic capital/securitization, AIRB and IFRS 9 models. This includes liaising with model development teams and other stakeholders and verifying model pipeline conceptual soundness and alignment with requisite regulatory frameworks.

Validation lead experience includes: (i) Canadian banking IFRS 9/CECL ECL models for wholesale portfolios (Commercial, Corporate/Sovereign, and CRE), (ii) Basel AIRB models for regulatory and economic capital purposes, (iii) downturn LGD methodology and margin of conservatism assessments (iv) validation of risk rating models which covered independent benchmark building, model calibration, assessment of data, and assessment of final UAT results.

Strong expertise in validating fraud/AML models. Major tasks included validation of XGBoost models under sparse development documentation.

2022-2023

Ernst & Young, LLP - Senior Consultant

Financial Services Risk Management Practice

Model Development

Development/re-development lead for IFRS9, CECL and stress testing models post M&A by client firm.

Expertise in developing IFRS 9/CECL/stress/challenger credit risk models. Extensive experience in developing models within OSFI, CCAR and DFAST guidelines and regulations.

Model Validation

Major models types assisted in validating include classification, regression, survival, GAMs, Merton type transition matrix (ASFR), & jump-diffusion on defaultable securities.