**Research Overview:** I am an applied economist focused on quantitative and computational methods (e.g. econometrics and machine learning) for understanding and assessing financial risk. My research encompasses the following areas:

1. ***Insurance Analytics & Economics:*** Claim Frequency / Severity, Loss Cost, Conversion, Underwriting Complexity, Credibility Theory, Pricing, Reserving, Fraud, Actuarial, Risk Pooling, Diversification, Moral Hazard/Adverse Selection, Investment / Portfolio Optimization, Catastrophe Models, Microinsurance, Credit Insurance.
2. ***Credit Risk:*** Credit Ratings, PD, LGD, EAD, Credit Portfolio Models, TTR, Prepayment, Recovery Rates, Concentration Risk, Sovereign Risk, Transition Matrix Models, Credit Cycles, Credit Spread, Macroeconomic Sensitivity, Loan Pricing, Credit Limits, Risk-Based Capital, Credit Derivatives, Country / Geography Risk.
3. ***Market Risk:*** Value at Risk (VaR), Expected Shortfall (cVaR), Stress Testing, Sensitivity to Macro Factors, Systematic Risks, Bubble Detection.
4. ***Model Risk:*** Model Validation, Backtesting, Benchmarking, Sensitivity Analysis, Scenario Analysis, Model QC, Model Monitoring, Drift Detection.
5. ***Applied Methods:*** Spatial Econometrics, TDA, ML, DL, NLP.