Karl Qu, CQF, FRM

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EDUCATION

University of Toronto, Toronto, Canada — May 2018

Master of Arts, Economics

University of Toronto, Toronto, Canada — May 2017

Bachelor of Commerce, Specialization in Finance and Economics, Minor in Statistics

PROFESSIONAL EXPERIENCE

Manager/Credit Officer, GRM Financial Institution*,* Scotiabank, Toronto, Canada — Oct 2020 – Present

- Perform credit adjudication for investment fund counterparties to facilitate Prime Brokerage, CMF, and FX desks activities
- Ensure the appropriateness of terms and conditions, exposures, margin, termination events, and other covenants for a wide range of facilities including repos, securities borrowing/lending, foreign exchange, and derivatives
- Advise on the risk characteristics of complex deals/trades, and report risk measures and market information to internal and external stakeholders
- Partner with data analytics team, and utilize data mining methods and advanced analytics techniques to identify previously unknown trends, establish optimal onboarding limits, and articulate business insights
- Participate in Trading Floor Risk Management (TFRM) projects to improve counterparty credit risk (CVA) hedging methodology and CMF & XVA collateral monitoring (VaR, Notional, and DV01)

Senior Analyst/Credit Officer, GRM Financial Institution*,* Scotiabank, Toronto, Canada — Aug 2019 – Oct 2020

- Preformed credit adjudication and comprehensive credit evaluation of counterparties to assess and mitigate any investment, business, or operation risk, and conducted ongoing monitor of the credit quality of the portfolio
- Built analytics tools, such as tableau dashboards and web applications, to provide actionable insights into risk measurements, operational efficiency, and other key portfolio performance metrics
- Prototyped new projects to support risk measurements and data analytics, developed production-level code, and collaborated with IT teams for integration into daily bank processes

Reporting Analyst, GRM Counterparty Credit Risk*,* Scotiabank, Toronto, Canada — Oct 2018 – Present

- Implement tools and processes to optimize data delivery and automate reporting workflow, and reduce the time required to prepare reports by 80%
- Identify and analyze reporting requirements, including technical specifications, design considerations, report generation frequency, user audiences, and distribution channels
- Design, develop, implement, and maintain infrastructure and software solutions (dashboards, code, and databases) which form the comprehensive management information system that tracks and reports counterparty credit risk metrics

RESEARCH & VOLUNTEER EXPERIENCE

Research Assistant, Dynamic Optimization & Operations Management Lab, Toronto, Canada — Oct 2020 – Present

- Collaborate with two Ph.D. students at the University of Toronto on projects that specialize in the research of automated trading strategies using reinforcement learning and quantum computing
- Develop codebase of reinforcement learning algorithms, trading platform, and data pipeline framework
- Perform model training, hyper-parameter tuning, backtesting, and paper-trading to evaluate the trading strategies
- Leverage cloud architecture for high-performance computing, data integration, and DevOps solution

SKILLS & CERTIFICATIONS

- FRM, CFA Level III Candidate, Certificate in Quantitative Finance (CQF; Distinction)
- AWS Certified Solution Architect - Professional, AWS Certified DevOps Engineer – Professional
- AWS Certified Data Analytics – Specialty, Google Cloud Professional Data Engineer, MCSE: Data Management and Analytics
- Python, SQL, Bash, Perl, C#, C++, VBA, HTML, CSS, JavaScript, Unix, Docker, Bloomberg, Tableau, Hadoop Ecosystem