



Senior Software Engineer - VP

Low Latency Trading – Data Technology

2023



Corporate Profile

TD Bank Group

Headquartered in Toronto, Canada, with more than 85,000 employees in offices around the world, The Toronto-Dominion Bank and its subsidiaries are collectively known as TD Bank Group (TD). TD offers a full range of financial products and services more than 25 million customers worldwide through three key business lines:

- **Canadian Retail** including TD Canada Trust, Business Banking, TD Auto Finance (Canada), TD Wealth (Canada), TD Direct Investing and TD Insurance
- **U.S. Retail** including TD Bank, America's Most Convenient Bank, TD Auto Finance (U.S.), TD Wealth (U.S.) and TD's investment in TD Ameritrade
- **Wholesale Banking** including TD Securities

TD had CDN\$1.3 trillion in assets on October 31, 2018. TD also ranks among the world's leading online financial services firms, with more than 12 million active online and mobile customers. The Toronto-Dominion Bank trades on the Toronto and New York stock exchanges under the symbol "TD".

The Toronto-Dominion Bank is a chartered bank subject to the provisions of the Bank Act (Canada). It was formed on February 1, 1955 through the amalgamation of The Bank of Toronto, chartered in 1855, and The Dominion Bank, chartered in 1869.

Business Context

TD Securities (TDS) is a top-two dealer in Canada with a growing US business and global execution capabilities, offering a full suite of capital markets and corporate and investment banking products.

The successful candidate will be working in a backend engineering role. Helping to build out core functionality and services in our data platform. Working with various programming languages (Java, Python, KDB) to meet the needs of the low latency trading business.

Job Description

This role is focussed on data technology within the FICC Low Latency Trading technology team.

The FICC (Fixed Income, Currencies & Commodities) Low Latency Electronic Trading Team is part of the TD Securities Technology Solutions group, covering all latency sensitive products of the FX, Fixed Income and Commodities businesses.

The team is responsible for the development and support of the strategic low latency e-trading set of applications for TD Securities, covering:

- Pricing
- Dealer-to-Dealer order execution
- Dealer-to-Client quoting solutions
- Automated/algo execution capabilities
- Risk management
- Data pipelines, storage and analytics

Our applications utilize the latest low latency technology and DevOps approaches to deliver highly scalable technology solutions.



These applications are used globally by Front Office quants and traders and enterprise risk systems and are critical to TD's client pricing and trading activities.

This is a global team with engineers in Toronto, London, Dublin and New York.

The objectives of the role will include:

- Build common agnostic libraries and solutions across markets. This is a cross-asset role covering Global Foreign Exchange, Fixed Income Markets as well as Commodities.
- Own, support and contribute to the planning, communication, design, and implementation of core platform solutions.
- Manage, support, and improve the core data platform directly supporting the business.
- Establish and maintain strong working relationships with key internal and external stakeholders and business partners.
- Collaborate across business lines, functional partners (IT, Risk, Operations), external vendors as well as the business SME.
- Demonstrate and promote best practices; seek to continually evolve and improve our workflows, tooling, and development practices and environment.
- Contribute to the skills and capabilities of the overall team via mentoring, reviews, and knowledge-sharing.
- Simplify and streamline existing workflows and processes through innovation, tooling, and automation.

Projects

- Greenfield build out of a KDB FICC platform
- Data pipeline and analytics integration with core python data services
- Data entitlement and permissions framework
- Streaming realtime analytics and reporting framework
- Own and iteratively develop our core data platform, services, and libraries.

Role Requirements

Key Qualifications / Skills / Experience

- Minimum 5 years' experience working in a relevant engineering, statistical or financial role
- Significant experience in the following:
 - Programming experience in either Java or Python
 - Programming or working experience with KDB/q
- Knowledge of capital markets, preferably in eTrading else similar financial, operational or regulatory data lifecycles and system workflows
- Experience in framework, library and API design
- Strong Objected Oriented, Functional programming background
- Effective SQL and RDBMS knowledge
- Understanding of test-driven development, tools, and practices
- Experience in requirements analysis and design patterns and soft engineering best practices
- Practitioner of agile methodologies, continuous integration and delivery tools and practices
- Passion for engineering and intuitive design

Behavioural

- Able to work effectively and drive delivery as part of a cross-functional team and partner with multiple stakeholders
- Strong sense of ownership, attention to detail and focus on the client experience
- Proactive, organised, self-starter
- Ability to think critically and pragmatically
- Excellent verbal and written communication; able to effectively convey complex and technical material to senior management and non-technical audiences
- Team-player, comfortable working individually and as part of a globally distributed group
- Great interpersonal skills, sense of fun and community

Desirable Skills / Experience

- Linux and shell-scripting experience
- DevOp tools and techniques
- Appreciation of DevOps and SRE practices
- Familiar with messaging protocols i.e. GRPC
- Experience working with containers, orchestration tools (docker, podman, Kubernetes)

Shared Commitments

Executives promote adherence to TDBG’s vision and purpose to be the better bank, and enrich the lives of customers, communities and colleagues. As part of the general management of their function, Executives are accountable to deliver against TD's five shared commitments:



- Think like a customer; provide legendary experiences and trusted advice
- Act like an owner; lead with integrity to drive business results and contribute to communities
- Execute with speed and impact; only take risks we can understand and manage
- Innovate with purpose; simplify the way we work
- Develop our colleagues; embrace diversity and respect one another

Inclusiveness

At TD, we are committed to fostering an inclusive, accessible environment, where all employees and customers feel valued, respected and supported. We are dedicated to building a workforce that reflects the diversity of our customers and communities in which we live and serve. If you require an accommodation for the recruitment/interview process (including alternate formats of materials, or accessible meeting rooms or other accommodation), please let us know and we will work with you to meet your needs.