LOW-LEVEL SOFTWARE ENGINEER - OPTIONS TRADING GROUP - CHICAGO IL

**Years of Experience:** 5 − 7 Years

# JOB DESCRIPTION:

Jump Trading is a globally-positioned, proprietary trading firm that remains on the cutting edge of algorithmic trading. We are a privately funded company and do not rely on outside investors or private equity. With offices in Chicago, London and Singapore, we trade across all major asset classes in the Americas, Europe and Asia. Because of our ongoing commitment to technology and human capital we have become an industry leader, quietly setting the standard for sophisticated trading strategies.

Our managing partners are passionate about supporting the exploration of new strategies and concepts throughout the company. They not only encourage new ideas, they expect them. We are more than 300 people with an incredibly diverse set of backgrounds, but collectively we share in our commitment to innovation and Jump's continued success which has recently expanded operations in the UK and Singapore.

At Jump, potential candidates will find a group of people committed to intellectual rigor, strong teamwork, and the pursuit of great discoveries. We recognize that to remain successful, it is imperative that we continue to hire and retain exceptional talent. We offer exceptional compensation and benefits packages.

This individual will be part of a options trading development group that is responsible for developing and maintaining highly scalable, multi tiered trading applications and infrastructure for the new option market making business.

* Develop Linux based high performance C++ servers in a large distributed environment.
* Analyze and improve latency critical code, enhance or rewrite as necessary and suggest alternatives for efficiency
* Experience with low latency, high performance analysis and know tools limitation and propose alternatives to gather information.
* Understand what the theoretical computational limitations
* Experience with lock-free data structures
* Good understanding of CPU caching in a multi-cpu, multi-core machines for intercommunication
* Use of GPU, CUDA, highly parallel technologies where appropriate
* Shared memory experience with communication between cores/hardware thread, memory barriers.
* Aware/familiar with the newest technologies available
* Being able to identify latency critical code
* Comfortable working with a large C++ code base and at ease with C++ advanced templates
* Create new servers and libraries
* Develop test harnesses for any new or modified processes

# CANDIDATE QUALIFICATIONS:

* Very strong low-level programming C++ skills in a Linux environment
* Experience with TCP protocol and pub/sub middleware
* Experience with Multithreaded programming and locking
* Experience with STL and Boost
* Analytical and problem solving skills
* Perl or Python scripting is a plus
* Knowledge of operating systems and networks
* Proficient with source code management system
* Confident team player motivated by a fast paced environment.
* Bachelors degree in Computer Science or Computer Engineering
* Minimum 7+ years hands on development experience