December 12, 2020

Gemini Trading 600 3rd Ave New York, NY 10016

Dear Hiring Manager,

My name is Josh Seba and I'm a software engineer based out of the Seattle area. I came across this position and am interested in returning to the financial markets. I previously worked at Bats Global Markets (acquired by Cboe Global Markets), where I gained skills in working with low-latency, high performance C++ and Linux systems. At Cboe and Bats, I was the primary maintainer for the order entry gateways and held ownership of the specifications and implementation of the two protocols used on the exchanges, FIX and BOE.

In 2017, I assisted with the migration of the Cboe Futures Exchange (CFE) to the Bats technology platform. In this project, I was responsible for extending the order entry protocols to support CFE and 24/7 exchange operation. This gave me the opportunity work with API design and integrations into existing systems. I also helped design the certification process members would use in order to access the production exchange systems to ensure that their systems could properly interact with the order entry gateways.

I also supported the effort to add complex options orders to the existing options exchanges. This required significant changes to the existing order entry specifications, as well as adding to the certification process so that members could have the new order types enabled for them to trade.

I also worked on the order routing system, specifically the service that entered orders to other exchanges, such as NYSE and NASDAQ. This gave me familiarity with several other order entry protocols, such as OUCH. I also changed the order routing protocol used between the Cboe exchanges from using standard FIX to Cboe' BOE protocol. This lowered the latency on millions of routed orders by almost 35%, which was immediately noticeable during operation reviews.

I currently work at Microsoft on the wireless networking and Miracast team. While in this position I have acquired skills in multithreaded and concurrent networking services, as well as designing APIs that are backwards compatible with existing versions. Projects I have worked on include extensions to the Microsoft 'Miracast over Infrastructure' extension protocol, as well as the public Miracast protocol. I have also worked on bring-up for the new Windows 10X operating system, adding support for NFC and the Wi-Fi certification process.

I would love to discuss this opportunity in more detail. I can be reached via email at josh@jseba.dev or by phone at 816-401-2696.

Sincerely, Josh Seba