

Quadrature Capital LLP - Quantitative Developers/Analysts

Quadrature Capital LLP is a small technology company applying rigorous statistical and mathematical methods to investment management. Founded in 2010 by two Ex-D.E.Shaw Portfolio Managers, we aim to combine great people and technology in a friendly, dynamic and creative environment.

We are looking for recent graduates / masters / doctorates in computer science or other numerical discipline. Candidates must have worked on multi-thousand line+ coding projects and want to apply their programming skills to quantitative problems. An ability to be practical rather than theoretical and good communication skills are essential, finance experience is not. Knowledge of time series analysis / stochastic calculus / machine learning / data mining / code optimisation / C++ / python / cuda are a plus.

Application is by CV, covering letter, and code sample.

Salary is competitive with performance-based bonus. City based.

The job entails quite a range of potential responsibilities depending on your abilities and the needs of the business.

You may be required to:

- Design and implement trading strategies;
- Build tools and engines that improve our ability to analyse data;
- Work on complex computational and data-related problems and implement efficient and innovative solutions;
- Robustly identify predictable patterns in highly stochastic data;
- Develop innovative ways to automatically and intelligently trade multiple asset classes globally;
- Proactively analyse data to develop models, tools, and platform enhancements to improve the quality of our execution;
- Develop visualisations, and other analytics for live and experimental trading;
- Improve system component performance by orders of magnitudes by improving the underlying algorithms/ method of processing / identifying systems bottlenecks;
- Read academic papers, industry publications and books to learn new and improved algorithms for use in trading, model estimation and portfolio optimisation;
- Analyse tick data to produce models, estimate market impact, and evaluate slippage / implementation shortfall of our trading;
- Improve the accuracy of our trading simulator, analyse differences to actual trading, and then work to improve the correlation;

- Create new proprietary models and algorithms and improve on existing;
- Design extremely high-performance, highly-reliable and finely-tuned numeric computational programs and implement such models/algorithms in python and C++ language with production-quality code;
- Develop and enhance multi-factor risk models;
- Monitor our trading system and fix production problems;

To do this effectively, you will need to be curious, intellectually honest, practical, purposeful, committed to high quality computer code and to apply clear judgment and critical thinking, as well as collaborate closely with others in the firm.

Skills and knowledge that are likely to be helpful include time series analysis / stochastic calculus / machine learning / data mining / code optimisation / C++ / python / cuda.

You will be joining a small team where your impact will be immediate and tangible and will be working with experienced hedge fund professionals who will teach you the business. We are open to hearing your ideas and encourage you to make suggestions on any area that can be improved.

We aim to reward people on their contribution to firm performance including helping others.