

Job Description

Position: Researcher II in the Portfolio Analytics Group of ITG Financial Engineering

Location: Boston

Position Description:

Working in a strong team which builds and implements statistical models for equity (and potentially – for futures and options) markets. Apply statistical, mathematical and financial theory to conduct investment- and trading-related research, including data collection, statistical modeling and prototyping. Position will include maintenance of existing Risk Models and research of new models for use by portfolio managers, portfolio- and algorithmic trading desks.

Responsibilities:

- Conduct research using statistical/econometrics tools to extend and develop quantitative models for risk and performance control and measurement;
- Design and enhance diagnostics tools to evaluate the models' performance;
- Develop prototypes for new models and collaborate with other departments to convert them into production code;
- Maintain development, production, and research-related documentation (script descriptions, incidents log files, white papers etc);
- Provide customer support to internal and external clients;
- Review and summarize the latest academic literature which is relevant to the group's research efforts.

Educational and Professional Requirements:

- Prefer fresh PhD graduates in quantitative discipline (Economics, Finance, Applied Math, Physics, Computer Science, Statistics etc);
- Strong statistical and econometric skills (linear and non-linear regression models, maximum-likelihood estimation, hypothesis testing etc).
- Proficiency in Matlab
- Familiarity in C/C++, Perl, or R, as well as UNIX environment
- Experience working with large data sets
- Knowledge of portfolio analytics (factor risk models, portfolio optimization) and market microstructure (price impact estimation, short-term return predictability) is a plus.
- Strong written and verbal communication skills. Must be able to effectively communicate quantitative topics and concepts.
- Self-disciplined, detail- and results-oriented.