

# First Quadrant Job Description

**Job Title:** Research Associate

## **SUMMARY**

The Research Associate works with the pool of researchers to support their endeavors in research and development on new and existing investment products. Support is also provided for Client Service, Marketing and Sales activities through the provision of analysis, reports, and exhibits. Their principle objective is to aid these other groups with their own objectives.

**ESSENTIAL DUTIES AND RESPONSIBILITIES** include the following. Other duties may be assigned.

- Write and maintain SAS code that supports other research projects and on-going research functions.
- Gather, verify, perform quality assurance upon, manipulate, summarize and present data.
- Run historical product simulations, recommend constraints that will enhance account guidelines and constraints to achieve optimal investment performance, and interpret and present performance results of simulations and live portfolios.
- Perform various support tasks such as library work, and spreadsheet work.
- Some individual research projects will be undertaken.

## **EQUIPMENT/SOFTWARE USED**

PC; general office equipment; UNIX (Solaris) and Windows. Software used: Microsoft Word, Microsoft Excel, SAS, PERL, and C/C++.

**QUALIFICATIONS** To perform this job successfully, an individual must be able to perform each essential duty/responsibility satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required to complete the essential functions.

- **EDUCATION and EXPERIENCE:** Bachelor's degree from a four-year college or university, with some mathematical and/or financial/economic orientation to course work. A basic knowledge of financial concepts and instruments is required.
- **LANGUAGE SKILLS:** Ability to effectively communicate in English both verbally and in writing. Ability to effectively present information in one-on-one and group situations to employees and third parties. Ability to write reports and present data for both internal and external consumption.
- **MATHEMATICAL & STATISTICAL SKILLS:** Strong skills are required in basic mathematics and in the ability to construct mathematical proofs. Modest familiarity with the basic aspects of statistical inference, as would have been obtained through university coursework.
- **PROGRAMMING SKILLS:** Knowledge of SAS is required, but may be learned on the job. Pre-existing familiarity with some programming and/or scripting languages (e.g., SAS, SPSS, C/C++, or PERL) is required to establish an ability to learn SAS on the job. Ability to write, organize and maintain mid-size bodies of code in SAS is necessary. It is required that code is well documented, well commented, and well organized.
- **RESEARCH SKILLS:** Ability to acquire and digest technical information related to basic financial concepts and theories as well as information related to financial instruments on one's own without the help of others. Reading of textbooks that would be required for understanding relevant theoretical or methodological issues.

- **REASONING ABILITY:** Strong reasoning and analytical capabilities are required. Must be able to grasp logic inherent in key financial theories, to construct logical arguments related to both empirical questions and the interpretation of empirical results, and to engage in mathematical reasoning in the form of a mathematical proof. The ability to logically interpret program code written in SAS is required.
- **OTHER SKILLS:** Ability to work in a support role with other researchers, marketing or sales people. Generally need to be able to think for oneself without a great deal of help from others.