



**TEXAS COMPTROLLER OF PUBLIC ACCOUNTS  
invites applications for the position of:**

## **Quantitative Data Analyst**

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| <b>JOB POSTING #:</b>              | 93002.16   |
| <b>STATE CLASSIFICATION #:</b>     | 1131-1132  |
| <b>STATE CLASSIFICATION TITLE:</b> | Investment Analyst II-III  |
| <b>SALARY GROUP:</b>               | B24-B26  |
| <b>VACANCIES:</b>                  | 1  |
| <b>CLOSING DATE/TIME:</b>          | Continuous   |
| <b>SALARY:</b>                     | \$6,250.00 - \$8,333.34 Monthly<br>\$75,000.00 - \$100,000.08 Annually |
| <b>LOCATION:</b>                   | Austin, TX (Rusk), Texas   |
| <b>DEPARTMENT:</b>                 | Texas Treasury Safekeeping Trust<br>Company                            |

### **GENERAL DESCRIPTION:**

**\*\*Texas Treasury Safekeeping Trust Company (TTSTC) provides an incentive compensation program plan in addition to State benefits\*\***

**Investment Analyst II** - Performs complex (journey-level) data analysis work. Work involves programming and development of tools and improvement and development of new quantitative and qualitative models used in analyzing investment data. Other duties include structuring data sets to support predictive analytics / modeling efforts. Works under general supervision with moderate latitude to use initiative and independent judgment.

**Investment Analyst III** - Performs advanced (senior-level) fundamental data analysis work. Work involves programming and development of tools and improvement and development of new quantitative and qualitative models used in analyzing investment data. Other duties include structuring data sets to support predictive analytics / modeling efforts. Works under general supervision with considerable latitude to use initiative and independent judgment.

### **ESSENTIAL JOB FUNCTIONS AND RESPONSIBILITIES:**

- Support the development of improvements in analytic techniques and capabilities. Improvement of existing and development of new quantitative and qualitative models and techniques using Matlab. May include developing scripts to automate the acquisition of external data.
- Developing interactive tools / graphical user interfaces for interrogating and displaying model results in Matlab or other programming languages. Maintains and improves reporting and communication of risk-monitoring systems. Consult and/or coordinate with other divisions of the Trust Company, the Comptroller's Office, custodian, consultants, data providers, and third-party contractors.
- Support the structuring of data sets to support other predictive analytics / modeling efforts.
- Performing qualitative and quantitative investment and risk analysis for potential investment opportunities and existing investments.

## **MINIMUM QUALIFICATIONS REQUIREMENTS:**

### **Education:**

- Bachelor's degree in quantitative discipline (Business Administration, Engineering, Math, Statistics, Econometrics, Finance, Economics, or Computer Science)
- Complete copies of college transcripts must be furnished to the divisional hiring representative at the time of the interview for positions requiring a college degree, and/or specific educational credits.

### **Preferred Education:**

Master's degree or PhD in quantitative discipline (Business Administration, Engineering, Math, Statistics, Econometrics, Finance, Economics, or Computer Science)

### **Experience:**

#### **Investment Analyst II**

- One (1) year of experience (1000 hours total) in Quantitative Computing Packages or Statistical Platforms (Matlab, Gauss, Stata, SAS, R, etc...)
- One (1) year of experience (1000 hours) conducting empirical research, performing data analysis, or developing quantitative models

#### **Investment Analyst III**

- Two (2) years of experience (2000 hours total) in Quantitative Computing Packages or Statistical Platforms (Matlab, Gauss, Stata, SAS, R, etc...) or [One (1) year of experience (1000 hours total) in Quantitative Computing Packages or Statistical Platforms (Matlab, Gauss, Stata, SAS, R, etc...) and 2 or more years of full-time equivalent SQL / database experience]
- Two (2) years of experience (2000 hours) conducting empirical research, performing data analysis, or developing quantitative models

### **Preferred Experience:**

- SQL / Database Management
- Other Programming Languages (C++, C#, Python, Java, Java Script, HTML, .NET, etc...)
- Advanced Excel / VBA
- Financial Data Tools (Factset, Bloomberg, Rimes)

### **Preferred Certification:**

- Certification in (or working towards) one or more of the following designations:
  - Chartered Financial Analyst (CFA)
  - Chartered Alternative Investments Analyst (CAIA)
  - Financial Risk Manager (FRM)

### **Notes:**

All applicants must submit responses to each question below and a resume along with their application. The responses and resume must be e-mailed to [mary.herrera@cpa.texas.gov](mailto:mary.herrera@cpa.texas.gov) or delivered to Comptroller of Public Accounts, Human Resources, 111 E. 17th Street, Austin, TX 78711 Attn: Mary Herrera within two (2) days of the date of application (Electronic or hard copy).

Question 1:

Describe the experience you have that fulfills the "Quantitative Computing Packages or Statistical Platforms" requirement. Specifically address:

- the position(s), coursework or other source of this experience
- example(s) of projects worked on while acquiring this experience
- examples of the computing packages / statistical platforms utilized (more specific?)

Question 2:

Describe the experience you have that fulfills the "conducting empirical research, performing data analysis, or developing quantitative models " requirement. Specifically address:

- the position(s), coursework or other source of this experience
- example(s) of projects worked on while acquiring this experience
- examples of the data analysis / quantitative techniques utilized

Question 3:

If applicable, describe your experience with project management / team leadership. Specifically address:

- the position(s), coursework or other source of this experience
- example(s) of projects worked on while acquiring this experience
- the nature of your leadership role

Question 4:

Provide evidence of your interest in a career in the financial field.

Question 5:

If applicable, describe your experience with...

- SQL / Database Management
- Other Programming Languages (C++, C#, Python, Java, Java Script, HTML, .NET, etc...)
- Advanced Excel / VBA
- Project Management

Veterans, Reservist or Guardsmen with an MOS or additional duties that fall in JAG Corps, Legal Services, Financial Management or other related fields pertaining to the minimum experience requirement may meet the minimum qualifications for this position. Please call Human Resources at 512-475-3560/800-531-5441 for more information or assistance.

**KNOWLEDGE, SKILLS, AND ABILITIES:**

**Knowledge of:**

- data analysis techniques and data structures

- knowledge of statistical concepts, methods, and models
- knowledge of investment concepts, terminology, styles, models, and strategies

**Skill in:**

- considerable skill in acquiring and organizing data, evaluating large amounts of information, and performing analysis of the data
- strong programming skills in one or more languages
- excellent quantitative problem-solving and analytical skills
- detail-oriented, organized, highly motivated and able to work independently and in a team environment
- skill in planning, organizing and prioritizing work assignments to manage a high-volume workload in a fast-paced and changing environment, and in completing detailed work with a high degree of accuracy
- skill in using a computer in a Windows environment with word processing, presentation, database and other business software to prepare correspondence and reports
- using effective written and verbal communication to convey information in a clear, concise manner (Communication)
- identifying and resolving problems by using strong analytical techniques, innovative approaches and taking initiative in preventing and solving problems (Problem Solving)

**Ability to:**

- absorb and apply information from formal and informal learning experiences
- to self-motivate
- anticipate future tasks / problems
- use judgement and take initiative in solving newly identified tasks / problems
- to think critically
- and willingness to travel (some international travel may be required)  
establish and maintain working relationships with co-workers, agency staff and management to achieve common goals (Teamwork)
- plan, organize, and prioritize multiple assignments to effectively manage a fast paced and changing work environment without compromising accuracy (Adaptability)
- consistently meet internal and external customer needs and expectations in a professional manner (Customer Service)
- act in the best interest of the agency, maintain confidentiality and continually strive to improve self and job performance (Professional Conduct and Development)
- maintain confidentiality and protect the privacy of state employees, taxpayers and other members of the public (Privacy and Information Security)

**Working hours:**

8 a.m. to 5 p.m., 40 hour work week, Monday through Friday. May occasionally work evenings, weekends or holiday. Hours may change based on business needs.

**Travel:**

5% or less

**Physical Requirements:**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

This position requires the incumbent to primarily perform sedentary office work; however, mobility (standing and walking) is routinely required to carry out some duties. It requires extensive computer

use. It requires the ability to bend, stoop, kneel, and reach as needed for filing and similar routine office duties. This job also requires normal cognitive abilities requiring the ability to learn, recall, and apply certain practices and policies. It requires the stamina to maintain attention to detail despite interruptions. Marginal or corrected visual and auditory requirements are required for reading printed materials and computer screens and communicating with internal and external customers. May involve moving up to 25lbs of office equipment/materials on a limited basis. The position may require travel to outlying field offices and other locations as necessary. Air and ground travel are required.

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**NOTES:**

- Applicants may be asked to participate in a skills demonstration and/or presentation.
- Salary is contingent upon qualifications and is subject to salary administration and budgetary restrictions.
- CPA employees in the same job classification, if selected, will be laterally transferred with no increase in salary. (An example might be an Accounts Examiner III in Revenue Administration who moves to an Accounts Examiner III in the Enforcement division.)
- Complete copies of college transcripts must be furnished to the divisional hiring representative at the time of the interview for positions requiring a college degree, and/or specific educational credits.

**VETERANS:**

We fully recognize, honor and enforce the Uniformed Services Employment and Reemployment Rights Act (USERRA) and encourage opportunities to hire Veterans, Reservists and Guardsmen.

**IMPORTANT NOTE TO ALL APPLICANTS:**

Unless otherwise indicated on specific postings, regular attendance is an essential job requirement of all positions. Your application for employment with the Comptroller of Public Accounts may subject you to a criminal background check. All positions requiring a degree and/or licensing require proof of degree and/or license at time of interview. If you are scheduled for an interview and require any reasonable accommodation in our interview process, please inform the hiring representative who calls you to schedule your interview. Whenever possible, please give the hiring representative sufficient time to consider and respond to your request. Only applicants scheduled for interviews will be contacted.

Thank you for considering employment at the Comptroller of Public Accounts! The Comptroller's office is an equal employment opportunity employer.

APPLICATIONS MAY BE FILED ONLINE AT:  
<http://www.comptroller.texas.gov/careers/>

Position #93002.16  
QUANTITATIVE DATA ANALYST  
MH

111 East 17th Street #124  
Austin, TX 78774  
512-475-3560

[human.resources@cpa.texas.gov](mailto:human.resources@cpa.texas.gov)

**Quantitative Data Analyst Supplemental Questionnaire**

- \* 1. Your responses to the questions below must also be stated in the appropriate sections of your state application. For example, if the position requires experience using MS Word and/or MS Excel, that experience must be indicated in the Duties and Responsibilities section. Please certify that all the information concerning your application is true and complete, and that you understand that any misstatement, falsification or omission may be grounds for refusal to hire or if hired, termination. Click "Yes" that you have read and understand this statement.

Yes

- \* 2. Which of the following best describes your level of education?
- High School or GED
  - 30 hours college
  - 60 hours college
  - 90 hours college
  - 120 hours college
  - Associate's Degree
  - Bachelor's Degree
  - Master's Degree
  - PhD Degree
- \* 3. Which of the following preferred degrees do you currently hold?
- Business Administration
  - Engineering
  - Math
  - Statistics
  - Econometrics
  - Finance
  - Economics
  - Computer Science
  - None of the above
- \* 4. How many years of experience do you have in Quantitative Computing Packages or Statistical Platforms (Matlab, Gauss, Stata, SAS, R, etc...)?
- Less than one year
  - One but less than two years
  - Two but less than three years
  - Three or more years of experience
  - No experience
- \* 5. How many years of experience do you have conducting empirical research, performing data analysis, or developing quantitative models?
- Less than one year
  - One but less than two years
  - Two but less than three years
  - Three or more years of experience
  - No experience
- \* 6. How many years of experience do you have working in SQL / database ?
- Less than one year
  - One but less than two years
  - Two but less than three years
  - Three or more years of experience
  - No experience
- \* 7. Which of the following do you have experience in using? (Check all that apply)
- SQL / Database Management
  - Other Programming Languages (C++, C#, Python, Java, JavaScript, HTML, NET, etc...)
  - Advanced Excel / VBA
  - Financial Data Tools (Factset, Bloomberg, Reuters)

None of the above

\* 8. Which of the following Certification do you hold? (Check all that apply)

Chartered Financial Analyst (CFA)

Chartered Alternative Investments Analyst (CAIA)

Financial Risk Manager (FRM)

Working towards one of the above certification

None of the above

\* Required Question