

Opening Date: August 30, 2021
Closing Date: Open Until Closed
Work Location: Austin, Texas
Posting Number: 21-76
Monthly Salary: \$5,000.00 - \$6,700.00*
Group/Class: B21/0242 or B23/0243
Travel %: 0%
Division/Department: O&A/IT/Application Development/Scientific Applications
Number of Positions: 1
*** Salary commensurate with experience and qualifications**

JOB VACANCY NOTICE

Scientific Programmer

(Programmer II-III)

*Texas Water Development Board, Stephen F. Austin Building
1700 North Congress Ave., Room 670, Austin, Texas 78701*

*Please contact Human Resources for accommodation requests.
Phone: (512) 475-2142*

*Apply at: Work in Texas www.workintexas.com OR
HR@twdb.texas.gov*

We offer a competitive compensation and benefits package including medical, dental, vision, 401(k), flexible spending, and flexible work hours so you can have a work/life balance! For more information about these benefits and more visit: <http://www.twdb.texas.gov/jobs/benefits.asp>

Veteran's Preference

Veterans, Reservists or Guardsmen with an MOS or additional duties that fall in the fields of 25B Information Technology Specialist, IT Information Systems Technician, C4110 Command, Control, Communications, Computers and Information, 8846 Data Systems Specialist, 3D0X4 Computer Systems Programming or other related fields pertaining to the minimum experience requirements may meet the minimum qualifications for this position and are highly encouraged to apply.

Additional Military Crosswalk information can be accessed at

http://www.hr.sao.texas.gov/Compensation/MilitaryCrosswalk/MOSC_InformationTechnology.pdf

Job Description Summary

The Scientific Programmers of the Information Technology Division supports the development of advanced applications and data analytics for critical water-related data. The highly advanced, scientific applications that are developed by this team help support the agency's mission in providing valuable information and support for the conservation and responsible development of water for Texas. This work involves performing complex (journey-level) to highly complex (senior-level) computer programming and software development work. Work involves assisting the project manager in coordinating programming, data distribution, and providing technical assistance to internal and external customers. Planning and analyzing user requirements, procedures, and problems to automate processing, data collection and distribution, and to improve existing systems. Assisting in maintaining software that retrieves and inserts data into relational databases. Assisting in maintaining data related webpages and/or geospatial viewers and providing technical assistance. May train others. Works under general to limited supervision, with moderate to considerable latitude for the use of initiative and independent judgment. Reports to the Manager of the Application Development Department.

Essential Job Functions

- Codes, tests, and debugs computer application programs and/or geospatial viewers as outlined by technical and functional requirements.
- Assists in the identification and scheduling of project deliverables, milestones and required tasks.
- Generates project requirements; provides effort estimates and resource requirements.
- Develops, analyzes, and revises system design procedures, program code, test procedures, and quality standards.

Female and minority applicants are encouraged to apply.

The Texas Water Development Board does not discriminate on basis of race, color, national origin, sex, religion, sexual orientation, age, or disability in employment or provision of services, programs, or activities.

Please visit TWDB Career Page: <http://www.twdb.texas.gov/jobs/> for more information.

Males born on or after January 1, 1960, will be required to present proof of Selective Service registration on the first day of employment or proof of exemption from Selective Service registration requirement. All offers of employment are contingent upon the candidate having legal authorization to work in the United States. Failure to present such authorization within the time specified by the U.S. Department of Labor will result in the offer being rescinded. Candidates must be eligible to work in the United States without requiring sponsorship. Only applicants interviewed will be notified of their selection or non-selection. Resumes will not be accepted in place of a completed State of Texas application unless indicated.

TWDB participates in E-Verify! Information from each new employee's Form I-9 will be provided to the Social Security Administration (SSA) and, if necessary, the Department of Homeland Security (DHS) to confirm work authorization.

HR-002 (Non-Supervisory)

Revised 06/26/2020



The TWDB is in compliance with the Americans with Disabilities Act and makes reasonable accommodations for applicants and employees with disabilities. If a reasonable accommodation is needed to participate in the job application or interview process, to perform essential job functions, and/or to receive other benefits of employment, please contact the Human Resources Division for assistance at (512) 475-2142. Deaf and hard of hearing applicants may contact our office via Relay Texas at 1-800-735-2989 (TTY/TDD).

Job Vacancy Notice (cont.)

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- Uses current software design and development methodologies and techniques to ensure quality and maintainability of applications and systems.
- Prepares test data and assists end users with testing.
- Prepares instructions for use during production runs.
- Prepares and develops instructions or manuals for end users.
- Analyzes proposed computer applications or geospatial viewers in terms of equipment requirements and capabilities.
- Analyzes, reviews and revises code to increase operating efficiency or to adapt to new procedures.
- Assists in the generation or installation of systems software.
- Assists in developing standards, best practices and procedures for programming staff.
- Confers with staff members to schedule work and coordinate programming projects.
- Prepares detailed analyses, plans, diagrams and verification procedures for existing and proposed computer applications.
- Develops and implements specialized programs to supplement and enhance systems software.
- May train others.
- Maintains confidential and sensitive information.
- Ensures individual and team files (electronic and hard versions) are appropriately maintained and timely disposed of in accordance with the agency's records retention procedures and schedule.
- Maintains required certifications and licenses and meets the continuing education needs and requirements of the position to include, attending mandatory training courses.
- May be required to operate a state or personal vehicle for business purposes.
- Performs other duties as assigned.

Minimum Qualifications

- Graduation from an accredited four-year college or university with major coursework in Computer Science, Information Science, Information Technology, Geographic Information Systems, or related field.
- Three to five years of experience developing software applications using Python. Experience may be academic, open source or work related.
- Relevant education and experience may be substituted on a year-for-year basis.

Preferred Qualifications

- Experience in the development and analysis of geospatial, engineering and/or scientific data.
- Experience in the development and analysis of time-series data.
- Experience with the graphical display of engineering and/or scientific data.
- Experience with numerical and statistical methods.
- Experience with groundwater and/or surface water modeling.
- Experience with Geographic Information Systems and developing / programming GIS web applications.

Knowledge, Skills, and Abilities (KSAs)

- Knowledge of local, state, and federal laws and regulations relevant to the Application Development Department; and of the principles and practices of public administration.
- Knowledge of the principles, practices, and techniques of computer programming and systems analysis.
- Knowledge of the Software Development Life Cycle (SDLC).
- Knowledge of relational databases and data management, with PostgreSQL experience preferred.
- Knowledge of the State of Texas environmental and natural resources, particularly water resources management.
- Knowledge of front-end technologies such as HTML, CSS, JavaScript and related tools.

Job Vacancy Notice (cont.)

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- Skills in using Microsoft Office programs such as Word, Excel, and Access.
- Skills in use of internet, email, word processing, spreadsheet, presentation, and database software.
- Skills in the development of unit tested software.
- Skills in the development of web applications and/or web services using Python, with experience in Flask or Django preferred.
- Skills in the development of scientific Python applications, with experience in NumPy, SciPy or Pandas preferred.
- Skills in the use of UNIX/Linux operating systems, with experience in systems administration preferred.
- Skills in the deployment of software applications, with experience in Fabric or Ansible preferred.
- Skills in the use of distributed version control systems, with experience in GitHub preferred.
- Skills in the use and deployment of Cloud services, with experience in AWS preferred.
- Skills in providing excellent customer service both internally and externally.
- Skills in decision making and problem solving.
- Skills in building cooperative partnerships with and provide services and products to internal and external customers.
- Skills in modifying or developing programs for computer applications.
- Ability to develop, analyze and design system requirements and processes.
- Ability to adhere to work schedules, follow procedures with respect to leave and submit accurate timesheets by prescribed deadlines.
- Ability to make mature, objective decisions and identify areas of potential problems.
- Ability to perform effectively and willingly when changes occur in scope and nature of the work and work environment.
- Ability to perform routine and non-routine work assignments accurately and on-time with little or no supervision.
- Ability to perform assigned duties and improve work habits and/or output.
- Ability to complete assigned work, on time, neatly and with infrequent errors.
- Ability to interpret policies, procedures, and regulations.
- Ability to provide prompt, courteous and accurate assistance and clear and concise communication to internal and external stakeholders both verbally and in writing.
- Ability to work and cooperate with others in a team environment.
- Ability to manage multiple tasks.
- Ability to stand/sit/move with no physical limitations or aids to perform activities such as retrieve/replace files in a large file system for boxes up to 30 lbs.
- Ability to operate a vehicle (state or personal) for state business and maintain a driver's license and driving record that complies with state and agency requirements.
- Ability to work days that may exceed eight hours, including early mornings, nights, and weekends.
- Ability to train others.

Remarks

- Copy of required academic transcripts and/or licensures and driving record must be submitted at the time of hire. Failure to provide required documentation will result in no further consideration for employment.
- Important Notice: Otherwise qualified candidates who are ultimately considered for potential employment with the Texas Water Development Board may be the subject of a request for any criminal history record information maintained by the Texas Department of Public Safety (DPS). Evidence of a criminal conviction or other relevant information obtained from the DPS shall not automatically disqualify an individual from employment with the Texas Water Development Board.