

Data Visualization Analyst II – Data Focus

Position Details

Class Code: 1201 Job Family: Information Systems Classification: Support Professional Terms of Employment: <u>Pay Grade 63 on the Support Professional Salary Schedule</u> FLSA STATUS: NON-EXEMPT

Position Summary

Under general direction, coordinates, designs, develops, implements, and refines data sources for use in data visualizations with tools/software packages to support data-based decision-making for Clark County School District schools.

Essential Duties and Responsibilities

The list of Essential Duties and Responsibilities is not exhaustive and may be supplemented.

- 1. Works directly with school administration and central office leadership to gather functional requirements; works with departmental team to synthesize final functional requirements.
- Plans, prepares, defines, structures, develops, and programs interactive, dynamic data visualizations (i.e., charts, graphs, tables, etc.) to meet end-users' functional needs.
- 3. Tests, validates, and evaluates department data visualizations for accuracy, performance, and alignment with end-user requirements.
- 4. Identifies functional data stores needed to fulfill data visualization needs; creates extract, transform, load (ETL) procedures necessary to access data stores in data visualization toolsets.

- 5. Designs, optimizes, and maintains relational data stores, including data structure, normalization, and indexing.
- 6. Designs, optimizes, and maintains Structured Query Language (SQL) queries/views to access data from relational data stores.
- 7. Resolves end-user inquiries in a timely, professional, proactive manner.
- 8. Writes requirements specifications, data dictionaries, self-documenting code, and other documents according to documentation standards.
- 9. Writes end-user documentation including procedures and instructions; assists end-users in implementing new/modified programs and applications.
- 10. Evaluates data sets to determine best data visualization methods for presenting information.
- 11. Develops program logic and processing steps; codes programs in various languages.
- 12. Works directly with the Nevada Department of Education to validate District data and develop/maintain business rules and processes for storing/aggregating student data.
- 13. Directs and develops talent of Data Visualization Analyst I's regarding data management best practices.
- 14. Reads and interprets state/federal legislation, including Family Educational Rights and Privacy Act (FERPA), Elementary and Secondary Education Act (ESEA) waiver, and Nevada Revised Statute (NRS) 385, to ensure compliance with data reporting/privacy requirements.
- 15. Designs and provides training to District leadership on using, manipulating, and analyzing interactive data visualizations.
- 16. Trains staff in work procedures; provides technical assistance in difficult situations, as directed.
- 17. Provides input into department goals, objectives, and budgeting.
- 18. Provides input into the evaluation of assigned staff.
- 19. Establishes priorities and project plans; meets with staff to give periodic updates of projects/schedules.
- 20. Conforms to safety standards, as prescribed.
- 21. Performs other tasks related to the position, as assigned.

Distinguishing Characteristics

Designs/develops data sources, extracts, and processes to populate data visualizations and meet end-users' requirements.

Knowledge, Skills, and Abilities (Position Expectations)

- 1. In-depth ability to write queries using SQL, including aggregate functions, group by/having statements, pivot/un-pivot structures, and sub-queries.
- 2. Ability to write software in Hypertext Preprocessor (PHP), Python, etc.
- Ability to write SQL stored procedures using Procedural Language (PL)/SQL or Transact (T)-SQL.
- 4. Ability to create ETL procedures.
- 5. Ability to query data from Online Analytical Processing (OLAP) data sources.
- 6. Ability to create data visualizations using commercial toolsets or scripting languages.
- 7. Knowledge of common database, spreadsheet, word processing, and student information system (SIS) programs.
- 8. Ability to translate end-user functional needs into clear problem definitions and solutions.
- 9. Ability to validate data visualization accuracy and refine tools based on feedback to increase usefulness to end-users.
- 10. Ability to write clear, concise, accurate reports, documentation, user instructions, correspondence, etc.
- 11. Ability to contribute to the department's service efficiency/effectiveness by offering suggestions and actively directing or participating in team efforts.
- 12. Ability to make effective verbal, written, analytical, technical, and persuasive presentations to individuals/groups.
- 13. Ability to keep current with technology and applications.
- 14. Ability to ascertain data accuracy to the greatest degree possible.
- 15. Ability to work on teams with coordinators, analysts, database administrators, and other District personnel.
- 16. Ability to learn/apply pertinent policies, procedures, laws, and regulations.
- 17. Ability to plan and organize work to meet schedules/deadlines.
- 18. Ability to communicate clearly and concisely, verbally and in writing.
- 19. Possess physical and mental stamina commensurate with the responsibilities of the position.

Position Requirements

Education, Training, and Experience

- 1. High school graduation or other equivalent (i.e., General Education Development (GED), foreign equivalency, etc.)
- Seven (7) years' professional work experience interfacing with enterprise databases (MySQL, Oracle, or SQL Server) to create reports, data visualizations, or business intelligence solutions; or, Associate degree from an accredited college/university in a related field (i.e., Computer Science (CS), Computing and Information Technology (CIT), etc.) and five (5) years' experience as described above; or, Bachelor's degree from an accredited college/university in a related field, and three (3) years' experience as described above.
- 3. One (1) year of experience writing queries, functions, and stored procedures using SQL.
- 4. One (1) year of experience creating reports, data visualizations, or BI solutions using a commercial toolset or a scripting language.
- 5. One (1) year of experience designing, optimizing, and maintaining relational data stores, including creating data structures, normalization, and indexing.

Licenses and Certifications

A valid driver's license or state-issued identification card.

Preferred Qualifications

- 1. Master's degree from an accredited college/university in Computer Science (CS) or Management Information Systems (MIS).
- 2. Experience querying data from OLAP data sources.

Document(s) Required at Time of Application

- 1. High school transcript or other equivalent (i.e., GED, foreign equivalency, etc.)
- 2. Copy of a valid driver's license or state-issued identification card.
- 3. Transcript(s) from an accredited college/university, if applicable.
- 4. Specific documented evidence of training and experience to satisfy qualifications.

Examples of Assigned Work Areas

CCSD Assessment, Accountability, Research, and School Improvement (AARSI) Division, and travel to/from schools and District offices.

Work Environment

Strength

Sedentary/medium - exert force of 20-50 lbs., occasionally; 10-25 lbs., frequently; up to 10 lbs., constantly.

Physical Demand

Frequent sitting, standing, walking, pushing, pulling, stooping, kneeling, crouching, reaching, handling, and repetitive fine motor activities. Hearing and speech to communicate in person, via video conference and computers, or over the telephone. Mobility to work in a typical office setting and use standard office equipment. Stamina to remain seated and maintain concentration for an extended period of time. Vision: Frequent near acuity, occasional far acuity, and color vision. Vision to read printed and online materials, a Video Display Terminal (VDT) screen, or other monitoring devices.

Environmental Conditions

Climate-controlled office settings with temperatures ranging from mild to moderate cold/heat. Exposure to noise levels ranging from moderate to loud for occasional to frequent time periods.

Hazards

Furniture, office equipment, communicable diseases, chemicals and fumes (as related to specific assignment), and power/hand-operated equipment and machinery (as related to specific assignment.)

Examples of Equipment/Supplies Used to Perform Tasks

Computers, software, peripheral devices, printers, audio/visual presentation materials, telephones, etc.

AA/EOE Statement

The Clark County School District is proud to be an equal opportunity employer. The Clark County School District is committed to providing all applicants and employees equal employment opportunities without regard to race, color, religion, sex, gender identity or expression, sexual orientation, national origin, genetics, disability, age, military status, or other characteristics protected by applicable law. Here at Clark County School District, we are a diverse group of people who honor the differences that drive innovative solutions to meet the needs of our students and employees. We believe that through a culture of inclusivity, we have the power to reflect the community we serve.

Job Revision Information

- Revised: 08/11/23
- Created: 07/10/14