

JOB DESCRIPTION

Job Title: **Data Systems Architect**
 Job Family: **District Technology Services**
 Pay Program: **Professional/Technical**
 Prepared/Revised Date: **March 2026**

FLSA Status: **Exempt**
 Pay Range: **7**
 Work Year: **248 days**

SUMMARY: The Data Systems Architect serves as the senior technical authority responsible for the design, development, implementation, and long-term sustainability of the district’s modern data infrastructure. This role translates complex instructional and business needs into scalable, secure system architectures that align with organizational strategy. Acting as both a collaborative technical leader and a strategic advisor, the Architect works in close partnership with Data Systems Developers, Systems Administrators, and Security teams to drive innovation and ensure a cohesive, reliable technology ecosystem across the district.

Alignment to DTS Priorities: This position plays a direct and essential role in advancing District Technology Services priorities:

- **Modern Systems** - Establishes the long-term technical vision and architectural standards for a secure, modern data ecosystem. By designing for interoperability and resilience, this role ensures the district’s infrastructure is not only sustainable but capable of evolving alongside emerging educational technologies.
- **Empowered Users** - Translates complex business and instructional requirements into intuitive system designs that eliminate technical barriers for staff and students. Through strategic mentorship of the Development team and the promotion of best practices, this role ensures that technology serves as a reliable, seamless partner in classrooms, schools, and district departments.
- **Actionable Insights** - Engineers the high-level frameworks for data governance, storage, and pipelines that guarantee the accuracy and accessibility of district information. By creating a single, trustworthy "source of truth," this role enables leadership to make high-stakes, evidence-based decisions with absolute confidence.

ESSENTIAL DUTIES AND RESPONSIBILITIES: *To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. The frequency and percentage of time of duties may vary based on building or department assignment. This position will require occasional evening hours.*

Job Tasks Descriptions	Frequency	% of Time
1. Lead the design, development, and implementation of a scalable, reliable, and secure data infrastructure - including data pipelines, data warehouses, and data lakes - to ensure efficient data collection, storage, and retrieval. Ensure the availability, interoperability, usability, and security of data and data systems. Recommend and implement governance and quality standards for data management and security.	D	25
2. Identify and implement strategies to optimize system performance, reliability, and cost-efficiency. Oversee and optimize a robust continuous build environment to accelerate solution development and software deployment cycles. Analyze and make recommendations to streamline development processes. Develop and champion security protocols and data privacy standards to protect sensitive information.	D	15
3. In partnership with team and department leadership, successfully execute multiple complex projects, coordinating timelines and deliverables across a team of developers while ensuring alignment with business objectives and successful on-time delivery. Develop and implement ongoing processes for communication with the team, department leadership and district stakeholders on the status of current and upcoming projects.	D	15

4. Build and maintain strong relationships with stakeholders across the organization to understand business requirements and translate them into technical solutions. Provide architectural guidance for the integration of new systems and data sources (SIS, ERP, LMS, HRIS, etc.), ensuring alignment with the overall IT strategy. Ensure data integrity and quality assurance as new systems are adopted and integrated with existing systems.	W	10
5. Build, develop, and mentor the Development team, providing technical guidance, support, and leadership. Promote a culture of continuous learning by recommending and coordinating training and advanced skill development.	W	10
6. Stay abreast of emerging technologies and industry trends to identify opportunities for innovation and improvement. Promote best practices throughout the organization, fostering collaboration between development, operations, and architect teams.	M	10
7. Lead the development and maintenance of comprehensive documentation for all supported data systems and processes. Collaborate with the team to ensure documentation is accurate, up-to-date, and easily accessible. Communicate changes and updates to leadership and relevant stakeholders.	M	10
8. Perform other duties as assigned.	Ongoing	5
	TOTAL =	100%

EDUCATION AND RELATED WORK EXPERIENCE:

- Bachelor’s degree in computer science or related field. Four (4) years of similar and relevant work experience may be substituted for this requirement.
- Minimum of five (5) years’ experience in a programming or DevOps role.

TECHNICAL SKILLS, CERTIFICATIONS / AREAS OF SPECIALIZATION:

Core Technical Skills:

- Expertise in SQL and relational database management (e.g., SQL Server).
- Proficiency in at least one object-oriented programming language (e.g., Python, C#).
- Proficiency with ETL processes and tools (e.g., ADF, SSIS) and data warehousing concepts (e.g., Snowflake).
- Expertise with cloud platforms (e.g., Microsoft Azure), source control, and CI/CD processes.

Preferred Technical Skills:

- Experience with low-code development environments (e.g., ServiceNow, PowerApps, Azure Data Factory).
- Experience with reporting tools (e.g., Power BI, SSRS).
- Experience with Web APIs (REST, JSON).

Required within one-year of hire to maintain position:

- Python PCEP-30-0x, PCEP-31-0x, or PCEP-32-10x
- Plus at least one :
 - Microsoft Certified DevOps Engineer
 - Snowflake Data Engineer or Snowflake Data Architect

OTHER SKILLS, KNOWLEDGE & ABILITIES:

- Criminal background check required for hire.
- Requires a valid driver's license and a satisfactory motor vehicle background check for the safe operation of district vehicles.
- Available for scheduled after-hours support and emergency system interventions as needed.
- Strong project management skills and experience with proven project management methodologies (Agile, Scrum, etc.) with a proven ability to lead and manage multiple complex IT projects from inception to completion.
- Strong leadership and interpersonal skills with the ability to mentor and develop teams.
- Exceptional verbal and written communication skills to effectively collaborate with both technical and non-technical stakeholders.
- Ability to think strategically, align technology with business objectives, and drive innovation.
- Ability and willingness to embrace and learn new systems, technologies, and trends.
- Strong analytical and problem-solving skills to address complex challenges.
- Ability to maintain confidentiality in all aspects of the job.

- Ability to promote and follow Board of Education policies, building and department procedures.
- Ability to communicate, interact and work effectively and cooperatively with all people, including those from diverse ethnic and educational backgrounds.
- Ability to recognize the importance of safety in the workplace, follow safety rules, practice safe work habits, utilize appropriate safety equipment and report unsafe conditions to the appropriate administrator.
- Ability and willingness to adhere to attendance requirements and to follow district procedures for absence reporting. Regular attendance is an essential function of the position and necessary for the efficient operation of the business. Employees are expected to be on time and punctual for work, conforming to established work hours. It is recognized that there are times when a person must be absent due to illness or other reasons.

MATERIALS AND EQUIPMENT OPERATING KNOWLEDGE:

- Advanced operating knowledge of enterprise data platforms and cloud environments (e.g., Azure, Snowflake, SQL Server).
- Proficiency with modern development and collaboration tools (e.g., Git/GitHub, Azure DevOps)
- Knowledge of enterprise data platforms (e.g., Snowflake) and low-code/no-code environments (e.g., ServiceNow, Microsoft Power Platform), including their roles in workflow automation and data management.
- Working knowledge of integrated district systems such as Student Information Systems (SIS) and ERP platforms.
- Operating knowledge of common productivity and collaboration suites (Microsoft 365, Google Workspace).

REPORTING RELATIONSHIPS & DIRECTION/GUIDANCE:

	POSITION TITLE
Reports to:	Director - IT Development and Operations

	POSITION TITLE	# of EMPLOYEES
Direct reports:	This job has no direct supervisory responsibilities	0

PHYSICAL REQUIREMENTS & WORKING CONDITIONS: *The physical demands, work environment factors and mental functions described below 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 functions.*

PHYSICAL ACTIVITIES:	Amount of Time			
	None	Under 1/3	1/3 to 2/3	Over 2/3
Stand		X		
Walk		X		
Sit				X
Use hands to finger, handle or feed				X
Reach with hands and arms		X		
Climb or balance		X		
Stoop, kneel, crouch, or crawl		X		
Talk			X	
Hear			X	
Taste	X			
Smell	X			

WEIGHT and FORCE DEMANDS:	Amount of Time			
	None	Under 1/3	1/3 to 2/3	Over 2/3
Up to 10 pounds			X	
Up to 25 pounds			X	
Up to 50 pounds		X		
Up to 100 pounds		X		

More than 100 pounds	X			
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MENTAL FUNCTIONS:	Amount of Time			
	None	Under 1/3	1/3 to 2/3	Over 2/3
Compare				X
Analyze				X
Communicate				X
Copy		X		
Coordinate			X	
Instruct		X		
Compute				X
Synthesize			X	
Evaluate				X
Interpersonal Skills			X	
Compile				X
Negotiate			X	

WORK ENVIRONMENT:	Amount of Time			
	None	Under 1/3	1/3 to 2/3	Over 2/3
Wet or humid conditions (non-weather)	X			
Work near moving mechanical parts	X			
Work in high, precarious places	X			
Fumes or airborne particles	X			
Toxic or caustic chemicals	X			
Outdoor weather conditions	X			
Extreme cold (non-weather)	X			
Extreme heat (non-weather)	X			
Risk of electrical shock		X		
Work with explosives	X			
Risk of radiation	X			
Vibration	X			

VISION DEMANDS:	Required
No special vision requirements.	
Close vision (clear vision at 20 inches or less)	X
Distance vision (clear vision at 20 feet or more)	X
Color vision (ability to identify and distinguish colors)	X
Peripheral vision	X
Depth perception	X
Ability to adjust focus	X

NOISE LEVEL:	Exposure Level
Very quiet	
Quiet	
Moderate	X
Loud	
Very Loud	