

Open Source Administrator and Developer

[St. Mark's School](#)

General Statement of Duties

The Open Source Administrator and Developer administers St. Mark's existing servers running open source software and collaborates in the development and maintenance of custom applications to support the school operations, with a particular focus on academic technology. The administrator is responsible for vetting existing policies and practices and recommending revisions in line with security and development best practices. The administrator is a member of the St. Mark's Technology Team and collaborates on setting policies and practices that affect existing and future open source and custom applications that support the school operations.

Supervision Received

The Open Source Administrator and Developer reports to the Director of Technology. The administrator will collaborate closely with the Director of Academic Technology.

Position Type

- Part time: Initially 10 hours/week, increasing to 20 hours/week

Application Instructions

Please submit a résumé with *customized* letter of interest to KGillette@GilletTEK.com.

Specific Duties

Function/ Role	Duty
SYSTEMS: Application Development	
	Create and manage application test & development environments pertaining to assigned systems
	Design and manage system and database integrations pertaining assigned systems
	Manage application test & development environments
	Participate in systems architecture discussions and lead design for application implementation pertaining to assigned systems
	Participate in the design and handle the implementation of system security enhancements on assigned systems
	Assist others to: Coordinate external system development & integration projects.
	Design, develop, enhance, & deploy academic technology support systems.
	Identify & approve needed enhancements to existing or creation of new information technology systems.

	Lead efforts to ensure data quality and integrity across all systems through systemic monitor and controls as well as in defining process and procedure standards pertaining to assigned systems
	Provide input to others who: Participate in the evaluation and selection of infrastructure technology
	Write and manage scripts to assist the appropriate monitoring of systems and architecture pertaining assigned systems
	Develop, document, & perform preventative maintenance on assigned systems on a regular basis.
	Establish availability standards and monitoring systems to ensure continuous availability of all supported services.
	Prepare IT system performance & uptime reports for assigned systems on a regular basis.
	Respond to & troubleshoot systems outages on assigned systems, working after hours as necessary.
	Review key hardware & software system performance, capacity indicators & error logs for assigned systems on a regular basis.
SYSTEMS: Change Management	
	Complete impact analysis on request for change on assigned systems.
	Initiate request for change for needed changes on any change-controlled systems.
	Update system documentation & configuration database after any changes on assigned systems.
SYSTEMS: Configuration Management	
	Create and maintain documentation of system design, operation and procedure manuals on assigned systems
	Develop & maintain configuration documentation/database records for all assigned systems.
	Perform annual audit of configuration documentation/database records for all assigned systems.
SYSTEMS: Continuity Management	
	Ensure regular backups of data on assigned systems in accordance with service levels & continuity plans.
SYSTEMS: Problem Management	
	Respond to & document problems on assigned systems.
SYSTEMS: Release Management	
	Handle all software updates & releases as released by the vendor pertaining to assigned systems
	Install & maintain hardware & software systems as assigned.
	Perform & validate approved changes to supported systems.
SYSTEMS: Security Management	
	Establish security standards and monitoring systems to ensure protection of all supported systems.
	Maintain database of user account security permissions on assigned systems by function/role.
	Monitor assigned systems for security threats, reviewing logs regularly.
	Monitor vendor threat alerts & apply security patches as required, following appropriate change controls.
SYSTEMS: Access Management	
	Create & delete user accounts on assigned systems according to established procedures.
SERVICES: User Support	
	Handle escalated Help Desk tickets related to database management & applications development on assigned systems
	Respond to & document escalated level 2 incidents from supported users on assigned systems.

SERVICES: Academic Technology Integration

	Assist others to: Implement technology that will result in a meaningful difference to teaching and learning.
	Assist others to: Meet regularly with the Director of Information Technology to coordinate the selection and implementation of new technologies.
	Assist others to: Design and implement new student training to support the BYOD program as part of orientation.
	Assist others to: Develop and offer technology training for the faculty, including summer workshops as necessary.
	Assist others to: Identify and produce needed technical documentation for faculty and students.
	Assist others to: Support faculty in special projects involving the use of technology beyond the classroom.

PROCESSES: Financial Management

	Provide detailed / invoicing and/or regular reporting on tasks performed
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PERSONNEL: Employee - IT Department

	Provide input to others who: Develop and enforce organization-wide policies related to IT pertaining to assigned systems
	Document position-related workflow processes according to departmental guidelines
	Participate in department meetings.
	Provide input to others who: Participate in general department decision-making and strategic planning pertaining to assigned systems

PERSONNEL: Employee - General

	Follow procedures as outlined in Employee Personnel Handbook & elsewhere.
	Maintain constructive attitude.
	Maintain professional dress, grooming, & presentation.
	Recommend position description updates to supervisor.

Assignment - Systems

	Administer St. Mark's Information Technology Knowledgebase WordPress site hosted on Amazon Web Services
	Administer Communications Microsite servers on Amazon Web Services
	Assist others to: Administer hosted Instructure Canvas instance
	Maintain and enhance LTI customizations on Instructure Canvas

Qualifications - Technical

	Required: Strong troubleshooting/problem solving skills
	Required: Knowledge of WordPress administration
	Required: Knowledge of TCP/IP addressing and routing
	Required: Knowledge of software version control systems
	Required: Knowledge of PHP programming
	Required: Knowledge of Linux systems administration
	Required: Knowledge of HTML & CSS

	Required: Knowledge of DNS / Dynamic DNS
	Preferred: Knowledge of UI/UX design
	Preferred: Knowledge of the Learning Tools Interoperability (LTI) standard
	Preferred: Knowledge of Ruby programming
	Preferred: Knowledge of JavaScript
	Preferred: Knowledge of Instructure Canvas API
	Preferred: Knowledge of Git and GitHub
	Preferred: Knowledge of Amazon Web Services EC2 administration
	Preferred: Conversant in Microsoft Windows Server systems administration

Qualifications - General

	Required: Strong project management skills
	Required: Strong customer service and interpersonal skills with attention to details
	Required: Strong communication skills, both written and verbal
	Required: Excellent organizational and time management skills
	Required: Ability to work independently and as part of a team within established guidelines to meet end user requirements
	Required: Ability to deal with stress during critical changes or outages.
	Required: Ability and desire to cross-train
	Preferred: Willing to be on-call and to work flexible hours to deal with off-hours assignments
	Preferred: Ability to communicate with technical and non technical staff in order to formulate solutions