#### SMART CITY ENGINEER

#### MAJOR FUNCTION

This is a multi-disciplinary profession with a range of technical responsibilities including a mixture of networking skills, server administration, IoT device implementation and management, audio visual components, and a deep desire to learn new technologies. Serves as a technology liaison between the Innovation group and other departments within Technology and Innovation and throughout the City of Tallahassee as a whole. Responsible for management of projects in the smart city realm, including efforts such as expansion of public Wi-Fi access, use of edge computing and Internet of Things for data collection outside of the data center, the creation of data analytics based on a lot of data, support for WCOTV, and support for the Networking team at the City of Tallahassee. Work is performed under the supervision of the Innovation Manager and is reviewed for achievement of desired results through regular status meetings.

# ESSENTIAL AND OTHER IMPORTANT JOB DUTIES

#### Essential Duties

Provide networking installation, troubleshooting, and upgrading assistance to the networking group as necessary. Networking duties will include assisting in design, installation, configuration, monitoring, and management of a diverse base of installed networking equipment, firewalls and/or network security applications, which includes wired and wireless data networks servicing data, voice, and video application throughout the City's network infrastructure. Collects and monitors data for system usage, performance, and vulnerabilities. Responsible for managing smart city projects from kick off to completion that include a wide variety of smart city based technical challenges as well as interfacing with customers from the entire City of Tallahassee organization. Can work independently to evaluate the relative strengths and weaknesses of software or hardware solutions and make recommendations as to the best choice for a particular use case. Work with the networking team and appropriate users from other departments to organize efforts to increase the availability of talgov Wi-Fi in public places or other City buildings. Identify areas that can be better served by installation of edge computing devices or Internet of Things and lead the project to purchase, install, and manage those field devices, providing reports and data analytics to City customers. Develop a strategy for the management of a heterogenous set of field devices that allows for an understanding of the status of remote devices. Able to work on projects with new technologies that can be used as proof of concept efforts to understand the opportunities and pitfalls of smart city initiatives. Works well in a team environment including collaboration on projects, sound verbal and written communication skills, and well-developed documentation capabilities.

## Other Important Duties

Periodically performs evaluations of new software tools to determine if they are an appropriate fit for the organization. Participates in educational opportunities. Has an active interest in keeping up with new developments in the smart city landscape by participating in webinars, speaking engagements, or forums in the smart city community. Pursues extended education on best practices by training and/or certifications in tools being used at the City.

## **DESIRABLE QUALIFICATIONS**

## Knowledge, Abilities and Skills

Knowledge of network systems analysis, multi-vendor firewalls, routing and fiber optics, VPN technologies, data communications techniques, telephony infrastructure, and IT management principles. Experience working with Internet of Things based devices such as beacons, sensors, cameras, or other network aware devices designed to collect data and interact with environments

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distant from a data center. The ability to work independently and manage a project from initiation to completion while managing the expectation of users. Knowledge of wireless networks and the ability to set up wireless networking for private or public use in indoor or outdoor environments. Experience using cloud providers for software as a service solution. Experience with server maintenance and / or the installation of application servers or other programs necessary to complete a use case. Experience or desire to learn about audio visual equipment to serve in a supporting role for WCOTV. Ability to take reverse engineer projects that have been completed by others, troubleshoot any issues and/or create a documentation set on the existing environment. Knowledge of task tracking, test case management, and system documentation software. An intellectually curious mindset and willingness to take on projects that are on the forefront of emerging technologies and are not necessarily tightly coupled to previous work efforts.

## Minimum Training and Experience

Possession of a bachelor's degree in data processing, information systems, computer science or a related field and two years of professional and technical experience that includes installation and maintenance of network communications systems and firewalls, wireless networks, network design, Internet/Intranet support, VPN design and support; or an equivalent combination of training and experience.

# Necessary Special Requirement

Designated positions assigned to this class may require a valid Class E State driver's license at the time of appointment.

Established: 12-07-20