City of Fresno 410050

#### **DIGITAL FORENSICS ANALYST**

#### **DEFINITION**

Under general supervision, a Digital Forensics Analyst performs highly specialized physical evidence examinations related to computer and digital forensics, note taking, report writing and courtroom testimony; and conducts digital forensic activities to uncover digital data, examine the information and preserve the information for evidence.

## SUPERVISION RECEIVED/EXERCISED

Receives supervision from the Division Manager or designee.

#### DISTINGUISHING CHARACTERISTICS

Incumbents perform complex and highly specialized examinations, including the processing and analysis of digital evidence including disassembly of computer hardware, forensic imaging of digital media, examination of data related to criminal offenses and recovery of data from cellular telephones and digital media. Incumbents working in this position will encounter data containing violent, graphic and explicit content. A Digital Forensics Analyst may conduct field investigations at crime scenes to search for, collect, and preserve evidence for laboratory analysis, reconstruct situations with physical and digital evidence of a crime in the demonstration of proof of the connection of persons with the crime. Incumbents may be required to work weekends, holidays and nights.

# **EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES**

May include, but are not limited to, the following:

Advises the Unit Supervisor in planning, coordinating and directing digital forensic activities in the Police Department Digital Forensic Laboratory.

Inventories, examines and performs complex technical analyses of computer related evidence such as digital media, including hard drives, cell phones, optical disks, memory cards, and other electronic data storage media. Locate, examine and collect digital evidence that may exist on external "cloud" servers.

Prepares written findings, displays or graphic representations for court presentation; testifies and interprets findings established by laboratory analyses, and may serve as a qualified expert witness.

Conducts research into new methods and procedures of scientific criminal investigation; maintains awareness of new development in the field of digital forensics; and incorporates new developments as appropriate within policy guidelines.

Works with other law enforcement agencies' to coordinate findings or to seek alternative digital forensic methods of analysis.

Participates in law enforcement working groups and or task force as directed. Participates in meetings or other related groups.

Provide forensic research, application, advanced casework, methodology development, and training to local forensic examiners and law enforcement agencies.

Processes crime scenes and/or clandestine laboratory scenes for digital - physical evidence and reconstruct the events of the crime from the evidence.

Performs other related duties as assigned.

## **JOB RELATED AND ESSENTIAL QUALIFICATIONS**

## Knowledge of:

The principles, methods, materials, equipment, and techniques of digital forensic criminalistics.

Crime scene procedures.

Current developments, literature and sources of information in the field of criminalistics.

Applicable state and federal statutes and case law pertaining to the seizure of digital evidence and the use of physical evidence in court.

The rules of criminal procedures concerning time limits, discovery, evidence, and expert witnesses.

Research methods and techniques.

Modern office equipment, software and hardware; applications for word processing, spreadsheets, and data bases.

## Skill/Ability to:

Use specialized digital forensic laboratory equipment and software and in demonstrating procedures and examinations to others.

The safe operation of a motor vehicle.

Understand and follow verbal and written instructions.

Establish and maintain effective working relationships with those contacted in the performance of duties, the general public and outside agencies.

Maintain accurate records, prepare clear and concise reports, and communicate effectively both orally and in writing.

Withstand intense examination in court as an expert on the laboratory analysis evidence.

Make accurate observations and records of test results.

Lift up to 60 pounds; involves walking, bending, stretching and crawling.

## MINIMUM QUALIFICATIONS

#### **Education:**

Possession of a bachelor's degree from an accredited college or university in digital forensics, computer science or a related field.

## **Experience:**

Two (2) years of experience in digital/computer forensics within a law enforcement agency or private organization. Additional qualifying experience may be substituted for the required education on a year-for-year-basis.

# **SPECIAL REQUIREMENTS:**

Possession and continued maintenance of a valid California Driver License at time of appointment.

Must successfully complete a Computer Voice Stress Analyzer (CVSA) and/or polygraph test, and an extensive background investigation prior to appointment.

Within one (1) year of appointment, incumbents must obtain and maintain the following certifications or equivalent:

- Cellebrite Certified Physical Analyst (CCPA)
- Magnet Certified Forensic Examiner (MCFE) for Magnet AXIOM
- Magnet Certified GRAYKEY Examiner (MCGE) for Magnet GRAYKEY

Should the training or availability of the aforementioned certifications be unavailable during the one (1) year time period, the timeframe to obtain may be extended by the Director of Personnel Services or designee.

APPROVED: (Signature on File) DATE: 12/5/2024

Director of Personnel Services

NEW: 9/22/17

Revised: SM:scm;vp 9/25/2024