

UNITED STATES DISTRICT COURT

Western District of North Carolina
Probation & Pretrial Services Office

Job Announcement Number: 16-20

Position Title: SYSTEMS ANALYST (CYBER-CRIME)
Type of Appointment: Full Time
Starting Salary: \$47,427 - \$77,090
Grade Level: CL 27
Position Location: Charlotte, North Carolina
Open Date: Tuesday, November 29, 2016
Closing Date: Monday, December 12, 2016

The U.S. Probation Office in Charlotte is seeking qualified applicants for a Systems Analyst position. The individual will serve as the district's authority on computer and telecommunications related crime. This position will provide forensic analysis of digital and other multimedia devices recovered by law enforcement officers and preserve it for later use as evidence utilizing appropriate scientific methodologies, forensic techniques, and quality assurance practices in support of criminal and civil investigations.

PRIMARY DUTIES

- Conduct forensic examinations of digital and other multimedia evidence through the application of scientific practices for the recognition, collection, analysis and interpretation of digital evidence for criminal and civil law purposes
- Advise probation officers and other court staff on the availability and reliability of digital evidence
- Work with probation officers and other agencies to acquire digital evidence
- Serve as subject matter expert and technical advisor in matters relating to the proper collection, preservation, packaging, and submission of digital and multimedia evidence; ensures evidence handling requirements are met
- May provide expert witness testimony; produce comprehensive reports and illustrative exhibits for federal proceedings at a level sufficient to explain evidence interpretations and conclusions from forensic examinations and scientific data to a lay audience
- Perform ongoing evaluation and validation of laboratory instrumentation and methods, operating protocols, and safety procedures under supervision; maintain awareness of safety procedures and identify possible physical conditions and / or laboratory procedures that may create unsafe conditions
- Act as liaison with other federal, state and local agencies on technical developments, forensic methods, and investigative problems of common interest
- Provide training sessions and assists staff regarding computer related crimes including training on investigation techniques and tools, supervision strategies, and legal and privacy issues
- Assist Court Services and Supervision officers formulate recommendations and conditions of release to address specific risk issues posed by cyber and computer related crimes

- Participate in training in the area of cyber-crime investigation and stay abreast of new developments, research, and technical tools to further the cyber and computer monitoring efforts
- Routine travel throughout the district is required
- Occasional travel outside of the district may be required

QUALIFICATIONS

Bachelor's degree in computer sciences, forensic science, or a closely related field from a college or university accredited by a national or regional accreditation organization recognized and sanctioned by the US Department of Education.

Advanced computer skills in the following areas is preferred:

- Advanced knowledge of hard drive types (IDE, SATA, SSD, etc.) and functionality;
- Ability to collect, analyze and interpret RAM and the important forensic information contained on a live machine;
- Advanced knowledge of computer hardware components and ability to examine / diagnose individually;
- Advanced knowledge of all common operating systems (Windows, OS X, Linux);
- Advanced knowledge of all common mobile operating systems (Android, iOS, Windows, RIM);
- Advanced knowledge of Windows Registry hives, plist, and /etc. files;
- Advanced knowledge of file systems, file names, file headers, file extensions, compound files, file metadata, and Windows artifacts;
- Advanced knowledge of hashing algorithms – CRC, MD5, SHA1, etc.;
- Understanding of character encoding (hexadecimal, binary, ASCII, Unicode, Decimal);
- Advanced knowledge of disk structure (logical vs. Physical – Master Boot Record), Volume Boot Records, Partition Tables, Unallocated space, and free space); and
- Advanced knowledge of networking environments and configurations

Advanced computer management skills in the following areas is preferred:

- Systems configurations;
- System restore and reformatting functions;
- Encryption / decryption / steganography;
- Anti-virus, anti-spyware, firewall functions;
- POP3/IMAP/SMTP applications vs. web based email;
- Open source applications;
- P2P and file sharing;
- Remote / cloud storage;
- Virtual machines;
- Bootable operating systems;
- Networks;
- IRC and chat functions;
- Slack Space / free space; and
- BIOS

BACKGROUND INVESTIGATION

Final applicant for this position is subject to a full National Crime Information Center (NCIC) background records check, fingerprint submission, credit bureau check and submission of certified academic transcript. Offer of employment is contingent upon favorable completion of these checks.

HOW TO APPLY

Applicants must submit the following in a **single PDF document** by close of business Monday, December 12 (5:00 PM):

- Cover letter and resume
- Completed AO-78, Application for Judicial Branch Federal Employment
 - Located at www.ncwp.uscourts.gov under All Employment Opportunities Link
- Copy of most recent performance evaluation

Application packages should be emailed to HR@ncwp.uscourts.gov

INFORMATION FOR APPLICANTS

Electronic Fund Transfer (EFT) for payroll deposit is required. Applicants must be U.S. citizens or eligible to work in the United States. The court is not authorized to reimburse candidates for travel in connection with an interview or to pay relocation expenses to the selected candidate. Due to the volume of applications received, the U.S. Probation Office will contact only the most qualified applicants who will be invited for an interview. Only those interviewed will receive notification when the vacancy is filled.

The Probation Office reserves the right to modify the conditions of this job announcement, or to withdraw the announcement, any of which may occur without prior written or other notice. More than one position may be filled from this posting. In the event that a position becomes vacant in a similar classification, within a reasonable time of the original announcement, the Probation Chief may elect to select a candidate from the applicants who responded to the original announcement without posting the position.

The Western District of North Carolina is an Equal Employment Opportunity Employer.