

# COMPUTER SCIENTIST



AN INSIDE LOOK

## FBI COMPUTER SCIENTIST

At the Federal Bureau of Investigation (FBI), our Computer Scientists work with an elite group of technology professionals within a dynamic, state-of-the-art environment to prevent cyberattacks through counterterrorism, counterintelligence, fraud, identity theft and other crimes. These programming experts regularly support Special Agents and Intelligence Analysts in their investigations by designing, developing and testing tools and systems to protect the American people and our national security.

FBI Computer Scientists bring extensive experience in computer programming, quality assurance and security protocols to address system integration/architectural design issues. They develop and design component-based, multitier enterprise applications and web services, while analyzing and testing systems and recommending changes based on their findings.

## Knowledge and Insight

Our Computer Scientists bring a wealth of knowledge in state of-the-art development techniques, including functional decomposition, structured design and structured programming of high-level languages to incorporate into automated systems. They're often responsible for researching, developing, testing and evaluating new software systems; leading Design Review Board meetings to ensure overall integration and synthesis of applications, systems and databases; conducting required analyses for database and data directory designs; applying both theoretical and application-oriented computer science methodologies; and formulating strategy for integrating U.S. government and FBI mission functions.

## **All Systems Go**

A typical day for a Computer Scientist may entail performing advanced computer system and network procurement, installation, administration and security implementation; troubleshooting and modifying existing cyber tools and methods to identify, preserve and analyze digital evidence; and providing technical assistance in conducting interviews, searches and other investigative and operational activity.

Given the evolving and increasingly sophisticated threats to our national security, our Computer Scientists often coordinate with private-sector agencies and other FBI divisions to lead in the resolution of technical and other relevant issues, as well as serve as subject matter experts and testify in court when needed. Remaining current with major new advances in cybersecurity and technology is key, as they're frequently called to provide guidance, explain tools and methods and address technological advances and practices on a national level.

# RELENTLESS PROBLEM SOLVERS

Because our work is constantly changing and expanding to meet new challenges imposed by rapid advances in technology, terrorism and intelligence threats, FBI Computer Scientists serve on the frontline of defense, contributing their valuable knowledge and expertise in researching and developing:\*

- » Algorithms
- » Computational Tools
- » Databases
- » Data Structures
- » Enterprise Architectures
- » Experimental Design
- » Modeling
- » Network Security
- » Programming
- » Software Engineering
- » Software Security

\*Note: Computer Scientist activities may vary by location.



## **COMPUTER SCIENTIST — CYBER**

FBI Cyber Computer Scientists take on more investigative roles in their work by:

- » Identifying problems and providing guidance on improvements to established networks.
- » Investigating difficult and unresolved problems involving highly complex network and telecommunications equipment software.
- » Applying or adapting new theories, concepts, principles, standards, methods or practices.
- » Developing system modifications.
- Maintaining and administering microcomputer operating systems.
- » Overseeing the implantation of new system hardware and software and monitoring the ongoing operation of a complex network environment.
- » Resolving difficult and complicated problems related to microcomputer equipment, software and configurations.

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# AN FBI CAREER IS ALL ABOUT DEDICATION

While both challenging and rewarding, there are specific entry qualifications required to get into the FBI. Those who complete the process become part of an elite team that keeps our country safe.



### Minimum Qualifications

- » Be a U.S. citizen.
- » Be able to obtain a Top Secret Sensitive Compartmented Information (SCI) Clearance.
- » Be in compliance with the FBI Employment Drug Policy.
- Have a bachelor's degree or higher from a U.S.-accredited college or university.
- » Possess a valid driver's license.

## **Automatic Disqualifiers**

- » Non U.S. citizenship.
- » Conviction of a felony.
- » Violation of the FBI Employment Drug Policy.
- » Default on a student loan insured by the U.S. government.
- » Failure of an FBI-administered drug test.
- » Failure to register with the Selective Service System (males only).
- » Knowingly or willfully engaged in acts or activities designed to overthrow the U.S. government by force.
- » Failure to pay court-ordered child support.
- » Failure to file income tax returns.

## APPLICANT PROCESS



**INFORM & APPLY** 

Visit **FBIJobs.gov** to view careers and open positions.



#### **INTERVIEW & SELECTION**

Be aware that the hiring process can take a year or more.



CONDITIONAL JOB OFFER & BACKGROUND INVESTIGATION

Once accepted, applicants will undergo an intensive background investigation.



#### FINAL JOB OFFER & ONBOARDING

Once accepted, attend the FBI Academy in Quantico, VA, for a short new employee introduction course.

