Opportunities for Computer Professionals at the USGS

The USGS is a scientific organization and good science is increasingly performed with the assistance of computers. Moreover, being a scientific organization means being a manager of information – massive data bases of scientific information about the land surface, water and mineral resources, biological resources, and other phenomena associated with the earth and natural resources sciences. Computer experts have become indispensable both to the research and to the information dissemination efforts of the USGS. The USGS has become a leader in specific areas of information management and computer science and has great opportunities for talented personnel in these crucial areas of its work.

Computer professionals at the USGS are engaged in a range of scientific and administrative support activities such as: massively parallel processing; CD-ROM publishing; frame relay and cell technology for telecommunications; desktop videoconferencing; image processing and massive data storage; developing the National Biological Information Infrastructure; information dissemination through the World Wide Web; programming using fourth generation development tools; and installation and operation of large-scale groupware. They are also involved in data base architecture and data base management activities, the evaluation of hardware or software capabilities, and the development and administration of network operations. Others carry out systems analysis and design activities in a variety of settings and establish and maintain telecommunication links to different hardware platforms within and outside the USGS.

It is not necessary to have scientific experience or education in the earth sciences to work as a computer professional at the USGS. Computer expertise is a vital part of every division and every discipline of the agency's work. Computer experts at the USGS find themselves respected as professionals in a collegial work environment dedicated to earth and natural resources science but dependent on computers and the people who run them.

Qualifications for Computer Specialists

Basic qualifications for computer specialist positions, GS-334, are a Bachelor's degree in any field or three years of experience that required the ability to analyze problems, plan and organize work, and communicate effectively orally and in writing. Candidates may also meet the basic requirements with a combination of related experience and education. These basic qualifications fulfill the requirements for the GS-5 level. Candidates who meet basic requirements will also qualify at GS-7 if they meet the criteria for Superior Academic Achievement*. Otherwise, applicants for position at GS-7 and above must have additional professional experience or directly related graduate education.

Qualifications for Computer Scientists

Basic qualifications for computer scientist positions, GS-1550, are a Bachelor's degree with a minimum of 30 semester hours in mathematics, statistics, and computer science. At least 15 semester hours of the required 30 semester hours must be in statistics and mathematics which includes differential and integral calculus. These basic qualifications fulfill the requirements at the GS-5 level. Candidates who meet basic requirements will also qualify at GS-7 if they meet the criteria for Superior Academic Achievement*. Otherwise, applicants for positions at GS-7 and above must have additional professional experience or directly related graduate education.

The USGS is an equal opportunity employer and does not discriminate based on race, color, national origin, gender, religion, age, non-disqualifying handicap conditions, or any other non-merit factors.

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*Superior Academic Achievement requires: membership in a national scholastic Honorary Society above the freshman level; or standing in the upper third of the class; or an overall GPA of 3.0 or higher; or a GPA of 3.5 or higher for all the work in the major as computed on 4 years of education or during the final 2 years of the curriculum.