



NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VA 22230

Title: Division of Computing and Communication Foundations (CCF)
Directorate of Computer and Information Science and Engineering (CISE)
Employment Opportunity - Program Director

Date: May 16, 2005

Dear Colleague:

The National Science Foundation's Directorate for Computer and Information Science and Engineering, Division of Computing and Communication Foundations (CCF) announce a nationwide search to fill a Program Director position at the National Science Foundation (NSF).

NSF Program Directors bear the primary responsibility for carrying out the Agency's overall mission: To support innovative and merit-reviewed activities in basic research and education that contribute to the nation's technical strength, security, and welfare. To discharge this responsibility requires not only knowledge in the appropriate disciplines, but also a commitment to high standards, a considerable breadth of interest and receptivity to new ideas, a strong sense of fairness, good judgment, and a high degree of personal integrity.

Qualification requirements include a Ph.D. or equivalent professional experience in computer science, computer engineering, communication, information science and computational science or allied disciplines, plus six or more years of successful research, research administration and/or substantial managerial experience in academe, industry, or government. Also desirable is knowledge of the general scientific community, skill in written communication and preparation of technical reports, an ability to communicate orally, and several years of successful independent research of the kind normally expected of the academic rank of associate professor or higher. All appointees are expected to function effectively both within specific programs, as well as in a team mode, contributing to and coordinating with organizations in the Directorate, across the Foundation, and with other Federal and State government agencies and private-sector organizations. Computer research and education areas supported by the Division include research and education activities that explore the foundations of computing and communication such as, computing and communication theory, algorithms for computer and computational sciences, and architecture and design of computers and software.

The particular areas of expertise sought for this position at this time correspond to the topic Computer Systems Architecture. This part of the Computing Processes and Artifacts (CPA) cluster supports basic research and education in system architecture in addition to individual hardware or software components that will be included within these larger systems. We seek new techniques for improving system reliability and maintainability in the presence of hardware or software induced emergencies or security attacks, and for increasing execution robustness by providing safety and performance guarantees. Additionally, computer architectures must provide enhanced functionality and performance necessary to meet the demands of diverse applications, while meeting stringent constraints on energy and power consumption, programmability, reliability, and complexity. Examples of such functionality may be architectural support for programmability, real-time computation, mobility, security, fault-detection and recovery, dynamic adaptation, and self-tuning. Fundamental advances based on novel scalable algorithms and implementation techniques are also sought. Periodic assignments to leadership of interdivisional, inter-directorate and interagency programs may be made.

Program Director position recruited under this announcement may be filled under the following appointment options:

- **Visiting Scientist Appointment.** Appointment to this position will be made under the Excepted Authority of the NSF Act. A Visiting Scientist is on non-paid leave status from their home institution and appointed to NSF's payroll as a Federal employee. NSF withholds Social Security taxes and pays the home institution's contributions to maintain retirement and fringe benefits (i.e. health benefits and life insurance), either directly to the home institution or to the carrier. Appointments are usually made for up to one year and may be extended for an additional year by mutual agreement.
- **Intergovernmental Personnel Act (IPA) Assignment.** Individuals eligible for an IPA assignment with a Federal agency include employees of State and local government agencies or institutions of higher education, Indian tribal governments, and other eligible organizations in instances where such assignments would be of mutual benefit to the organizations involved. Initial assignments under IPA provisions may be made for a period up to two years, with a possible extension for up to an additional two-year period. The individual remains an employee of the home institution and NSF provides funding toward the assignee's salary and benefits. Initial IPA Assignments are made for a one year period and may be extended by mutual agreement.
- **Temporary Excepted Service Appointment.** Appointment to this position will be made under the Excepted Authority of the NSF Act. Candidates who do not have civil service status or reinstatement eligibility will not obtain civil service status if selected. Candidates currently in the competitive service will be required to waive competitive civil service rights if selected. Usual civil service benefits (retirement, health benefits, life insurance) are applicable for appointments of more than one year. Temporary appointment may not exceed three years.

For additional information on NSF's rotational programs, please see "Programs for Scientists, Engineers, and Educators" on the NSF website at http://www.nsf.gov/about/career_opps.

Questions concerning the Program Director position should be directed to:

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