Association for Computing Machinery

Advancing Computing as a Science & Profession

Fact Sheet

About ACM: ACM, the Association for Computing Machinery (www.acm.org), is the premier global community of computing professionals and students with nearly 100,000 members in more than 170 countries. ACM organizes computing's major technical conferences and publishes highly-regarded journals and magazines, including *Communications of the ACM*. The ACM Digital Library, the most trusted resource for computing professionals, contains all ACM's publications from the inception of the organization in 1947. ACM recognizes excellence and achievement through its renowned awards program, including the most prestigious award in computing, the ACM A.M. Turing Award, often referred to as the "Nobel Prize of Computing." ACM promotes professional standards through a code of ethical conduct for computing professionals, encourages informed public policy decisions around technology, promotes quality instruction in computing education for students at all levels, and champions diversity and participation in the field.

Membership Organization Structure: ACM's nearly 100,000 members come from industry, academia and government institutions around the world. ACM is a member-driven organization, and through its membership, volunteers serve on various ACM boards, committees, and task forces that comprise ACM's governing structure.

Special Interest Groups: ACM's 37 Special Interest Groups (SIGs) address the varied needs of today's IT and computing professionals, including computer graphics, human interfaces, artificial intelligence, data mining, mobile communications, computer education, software engineering, and programming languages. Each SIG is organized around specific activities that best serve its practitioner and research-based constituencies. Many SIGs sponsor leading conferences and workshops, produce newsletters and publications, and give awards to recognize top talent in their fields.

Activities: ACM carries out its mission through conferences, publications, educational programs, public awareness activities, and Special Interest Groups. It sponsors over 170 conferences annually, including conferences on computer graphics (SIGGRAPH); human computer interaction (CHI); high performance computing (SC); design and automation of electronic systems (DAC); knowledge discovery and data mining (KDD); data communications (SIGCOMM); and computer and communications security (CCS). ACM's Professional and Student chapters worldwide serve as hubs of activity for ACM members and the computing community at large. They provide seminars, lectures, learning forums and networking opportunities with peers and experts across the computing spectrum.

Publications: ACM publishes, distributes and archives more than 50 publications that provide original research and first-hand perspectives from the world's leading thinkers in computing and information technologies. Journals include ACM's *Transactions* series of publications on technical subfields of computing, including data mining and management, architecture and accessibility, programming

languages and software engineering, graphics and networking, Internet and Web technology, computational logic and storage issues, and computer-human interaction among many other specialties. Magazines include: *Communications of the ACM*, featuring as contributors some of the most knowledgeable and respected people in the field; *acmqueue*, a website and mobile app for practicing computing professionals; *XRDS*, ACM's student magazine; *Interactions*, for human and computer interaction; *Computers in Entertainment*, covering entertainment technologies; *Ubiquity*, a magazine and forum for in-depth analysis on IT issues; and *eLearn*, tracking developments in distance learning.

ACM Digital Library: The ACM Digital Library is a comprehensive online collection of ACM publications, including a 60+year archive of more than 50 ACM journals, magazines, ACM conference proceedings and ACM SIG newsletters. It contains over 4.5 million pages of text, with full-text articles from ACM publications dating back to the 1950s, and third-party content with selected archives. The ACM Digital Library also provides access to more than 2.5 million bibliographic sources and citations from computing books, journals, proceedings and theses beyond ACM's proprietary literature. The ACM Digital Library's enhanced search technology enables users to more accurately focus their searches, and to export search results into bibtex, endnote, ACM reference, or csv formats. The DL also serves as a platform for ACM Books, a series of scholarly and research publications that includes books from across the entire spectrum of computer science subject matter. Author profile pages allow for discovery of their collected works, affiliations, and metrics that gauge their influence and impact.

Annual Awards: Among the honors that ACM bestows each year are the A.M. Turing Award (widely known as the "Nobel Prize of Computing"); the ACM-Infosys Foundation Award in the Computing Sciences for contributions to a contemporary innovation; the Grace Murray Hopper Award for young computer professionals; the Paris Kanellakis Theory and Practice Award; the Karl V. Karlstrom Outstanding Educator Award; and the Allen Newell Award honoring contributions that bridge computer science and other disciplines.

Public Policy: ACM's public policy work includes supporting the US Public Policy Council (USACM), the Education Policy Committee (EPC), and the ACM Europe Council Public Policy Committee (EUACM).

USACM, composed of ACM member volunteers, serves as the focal point for ACM's interaction with US government organizations, the computing community and the public on public policies affecting information technology. USACM seeks to inform the US government about policies that impact the computing community and the public. It also identifies significant technical and public policy issues; monitors information on relevant US government activities; and responds to requests for information and technical expertise from US government agencies and departments.

ACM's Education Policy Committee engages policymakers and the public on public policy issues in computer science education. It focuses on steps to ensure that computer science education is identified as a critical component of education policy in the US at both federal and state levels.

The ACM Europe Policy Committee (EUACM) is a standing committee of ACM Europe Council dedicated to engage with the European Commission and member states' governmental bodies and informatics and computer science communities. The aim is to become a source of expert advice on computer science and informatics matters representing the entire computer science professional community.