Guiding ACM as Both a National and an International Society

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ACM CEO

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Outline

• A look at ACM today
• Key points in ACM history
• My history with ACM
• The move to being an international society
• Being international and engaging the national agenda in the US
ACM Today

• Membership: 107,000 worldwide
• Core scholarly activities
  – 36 SIGs
  – 50+ journals and transaction
  – 80 periodicals in computing when SIG newsletters included
  – 150+ conferences/symposia each year
  – Sophisticated digital library
    • 35,000 individual subscriptions
    • 3,000 institutions have access
• Initiatives
  – Europe, India, China
  – Education policy in the US
  – Revitalizing Communications of the ACM
ACM History

• 1947: Founded by the inventors of ENIAC
• 1954: Incorporated
• 1954: First publication: Journal of the ACM
• 1959: Communications of the ACM
• 1960’s: Special Interest Groups (SIGs)
• 1970’s: Reach beyond the research community to serve “data processing managers”
• 1980’s: Growth in SIGs, conferences, publications, educational activities (e.g., accreditation – CSAB/ABET)
• 1990’s: Electronic publishing and the Digital Library, initial efforts at being more international
• 2000’s: Growth in the publications, conferences, service to practitioners, international activities
My History with ACM

• Joined ACM in 1968 as a graduate student in computer science

• 1973 – 1982: Professor of computer science (University of Connecticut)
  – SIGPLAN Executive Committee (1977)
  – SIGPLAN Chairman (1981)

• 1982 – 1999: Research manager, Xerox PARC
  – ACM Council member at Large (1984)
  – SIG Governing Board Chair (1986)
  – Vice President (1988)
  – President (1990)

• 1999 – present: Executive Director and CEO of ACM
  – Responsible for ACM, but do not run the operations
  – Co-lead ACM with the elected volunteers
ACM Goals, Priorities, Vision

• Compelling membership proposition
• Be the preferred publisher in computing
• Be international
• And yet, represent the computing community in the US
ACM Goals, Priorities, Vision

- Compelling membership proposition
  - Goal: increase value proposition for being an ACM member
  - Approach: hold dues constant, increase services
  - Dues: $99USD (~70 Euro) since 2003
  - New services
    - Electronic updates such as TechNews
    - 1,200 electronic books and references (Safari, Books 24X7)
    - 3,000 online courses
    - A new *Communications of the ACM*
Membership

Total

Professional

Student
Membership

- Steadily increasing since 2003
- 70% professional; 30% students
- Geographic diversity
  - 57% US; 43% Non-US
  - 41% of ACM professional members are from outside the US
  - 49% of ACM student members are from outside the US
- ACM membership growth is largely from outside the US
ACM Goals, Priorities, Vision

• Be the preferred publisher in computing
  – Strong value proposition for authors, editors, and the community
    • Reputation for high quality
    • Significant support for launching and sustaining a publication
    • Instant worldwide distribution through the ACM Digital Library
    • Leading-edge Digital Library
    • Liberal copyright policy with authors retaining significant rights
    • High quality conference proceedings series for non ACM events
  – We are publishing more than at any point in our history
Be International

• Initial efforts ~1990
  – Encourage SIGs to hold conferences outside the US
  – European service center
  – Became an international society member of IFIP

• Since 2006 a much more serious and focused effort
  – Seek non-US computer scientists for all major volunteer positions
    • Elected positions (Council, SIG leadership)
    • Appointed positions (board chairs, conference committees, editorial boards)
  – Regional focus
Be International

- Regional Councils
  - Bring together distinguished computer scientists who know the region and know ACM
  - Focus on
    - Raising awareness of existing ACM activities
    - Increase the number of high-quality ACM technical activities in the region
    - Decide whether to engage with national computing societies
      - Europe: yes for some
      - India: no
      - China: yes
    - In the long run ...
      - Contribute to advancing computing as a science and profession
      - Increase awareness of the role and value of ACM
      - Bring the members of the region more fully into ACM
  - Established in Europe, India, and China
Be International – ACM Europe Council

- **Chair:** Fabrizio Gagliardi, Microsoft Research, Europe
- **Members:**
  - Ricardo A. Baeza-Yates, Yahoo! Research, Barcelona, Spain
  - Michel Beaudouin-Lafon, Universite Paris-Sud, France
  - Mashhuda Glencross, Loughborough University, UK
  - Carlo Ghezzi, Politecnico di Milano, Italy
  - Wendy Hall, University of Southampton, UK
  - David Harper, EMEA University Relations, Google, Zurich, Switzerland
  - Paola Inverardi, University of L'Aquila, Italy
  - Matthias Kaiserswerth, IBM Research, Zurich, Switzerland
  - Gabriele Kotsis, Johannes Kepler University of Linz, Austria
  - Jan van Leeuwen, Utrecht University, Netherlands
  - Andrew McGettrick, University of Strathclyde, Scotland
  - Avi Mendelson, Microsoft Research, Israel
  - Bertrand Meyer, ETH Zurich, Switzerland
  - Burkhard Neidecker-Lutz, Research Division, SAP AG, Germany
  - Gerhard Schimpf, Chair, German ACM Chapter, Pforzheim, Germany
  - Marc Shapiro, INRIA and LIP6, France
  - Paul Spirakis, University of Patras and the Greek Computer Technologies Institute, Greece
  - Serdar Tasiran, Koc University, Istanbul, Turkey
  - Mateo Valero, Technical University of Catalonia, Spain
  - Alexander Wolf, Department of Computing, Imperial College London, UK
Be International – ACM India Council

- **Co-Chairs**
  - Anand Deshpande, CEO Persistent Systems
  - P J Narayanan, IIIT Hyderabad

- **Members**
  - Sanjeev K Aggarwal, IIT Kanpur
  - M Balakrishnan, IIT Delhi
  - Vivek Balaraman, Haveli, India
  - Partha Pratim Chakrabarti, IIT Kharagpur
  - Subrahmanyam Goparaju, SET Labs, Infyosys
  - Pankaj Jalote, IIIT Delhi
  - Mathai Joseph, Tata Consultancy Services
  - Ananth Krishnan, Tata Consultancy Services
  - S Sadagopan, IIIT Bangalore
  - Prithwis Mukerjee, Praxis Business School, Calcutta
  - Madhavan Mukund, Chennai Mathematical Institute
  - Girija Narlikar, Bell Labs, Mumbai
  - Anandna Padmanabhan, Microsoft Research India
  - Srinivas Padmanabhuni, Infosys
  - Krithivasan Ramamritham, IIT Mumbai
Be International – ACM China Council

**Chair**
- Jiaguang Sun, Tsinghua University

**Members**
- Binxing Fang, University of Posts and Telecom
- Jinpeng Huai, Beihang University
- Changjun Jiang, Tongji University
- Xiangke Liao, National University of Defense Technology
- Huimin Lin, Institute of Software, Chinese Academy of Sciences
- Yinhao Liu, Tsinghua University
- Jian Lv, Nanjing University
- Hong Mei, Peking University
- Vincent Shen, Hong Kong University of Science and Technology
- Maosong Sun, Tsinghua University
- Ninghui Sun, Institute of Computing, Chinese Academy of Sciences
- Feiyue Wang, Institute of Automation, Chinese Academy of Sciences
- Shan Wang, Renmin University of China
- Zhaohui Wu, Zhejiang University
- Renyi Xiao, NSF of China
- Andrew Yao, Tsinghua University
- Hongjiang Zhang, Microsoft ATC
- Yaoxue Zhang, Tsinghua University
- Nanning Zheng, Xi’an Jiaotong University
ACM Europe

- Launched in 2009 at ECSS in Paris
- Focus to date
  - Raising awareness and generating nominations of ACM European members for
    - ACM Awards
    - ACM Fellow, Distinguished Educator/Scientist/Engineer, Senior Member
  - Suggesting ACM members in Europe for ACM award committees and editorial boards
  - Increasing the number of ACM chapters in Europe
  - Increasing the number of ACM conferences in Europe
  - Increasing the number of Europeans in the ACM Distinguished Speakers Program
  - Launching an ACM Europe Newsletter
ACM Europe

• Current agenda
  – Workshop for ACM Europe chapter leaders
  – An ACM Europe Federated Computing Research Conference
    • Modeled after FCRC in the US
    • ACM ECRC – European Computing Research Congress
      – Co-locate research conferences/workshops/meetings
      – Add value with overarching session of general interest to European researchers
    • ACM ECRC ‘13 – Paris
      – CHI conference
      – Web Science conference
      – Hypertext conference
      – Euro-TM (European Network meeting on transactional memory)
      – GLSVLSI (SIGDA research workshop/conference)
      – HiPEAC (a research workshop)
      – MOBIHCI (SIGMOBILE conference)
ACM Europe

• Current agenda (continued)
  – Increase collaboration with Informatics Europe
    • Seats on each organization's board
    • Create a significant European computing education conference
      – ACM Europe (through SIGCSE)
      – Informatics Europe
      – Grow the existing ITiCSE into something significant
    • Conduct a joint study of secondary (pre-college) computing education in Europe
Be International

• Results to date
  – More members from outside the US
  – More conferences held outside the US
  – More Fellows from outside the US
  – More awards recipients outside the US
  – More articles in CACM focused outside the US
Be International

• Results to date
  – The last ACM Council Meeting
    • Alain Chesnais
    • Wendy Hall
    • Barbara Ryder
    • Vicki Hansen
    • Alexander Wolf
    • Doug Terry
    • Scott Owen
    • Andrew Sears
    • Carlo Ghezzi
    • Mathai Joseph
    • Vint Cerf
    • Mary Lou Soffa
    • Anthony Joseph
    • Salil Vadhan
    • Ron Boisvert
    • Andrew McGettrick
    • PJ Narayanan'
    • Yunhao Liu
    • Elaine Weyuker
    • Gene Spafford
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What about the US?
ACM and the US

- In our core activities – SIGs, conferences, publications, chapters – ACM is an international organization
- But there are significant issues in the US the computing community needs to engage
- ACM must, and does, play a major role in
  - Technology policy in the US
  - Education policy in the US
- ACM engages these areas through specific committees
  - USACM Council
  - ACM Education Policy Committee
- ACM has the most flexibility to represent the community
ACM and the US

• USACM
  – Advises and educates Federal policy makers (mostly Congress) on technology issues
    • Research funding (with CRA)
    • Security and Privacy
    • Intellectual Property
    • Digital Government
    • Electronic Voting
    • Accessibility
  – Engage experts in
    • Developing statements
    • Issuing reports
    • Delivering Congressional testimony
ACM and the US

• ACM Education Policy Committee
  – An effort to bring the computing community “to the table” in Federal and State conversations about STEM education
  – The goal: help policy makers realize that
    • Computing is a distinct discipline
    • Computing is not the “T” in STEM
    • Pre-college computing education is disappearing from the national landscape
    • Fundamental knowledge of computation is critical to an educated 21st Century workforce
    • Federal government, state governments, and the 15,000 school districts in the US all have roles to play
ACM and the US

- ACM Education Policy Committee (continued)
  - Behind ACM’s engagement of numerous tasks/initiatives
    - Computer Science Education Week
    - “Computing in the Core” advocacy coalition
      - Computer Science Education Act
      - Elementary and Secondary Education Act
    - The WGBH (Public Television) “Dot.Diva” effort to shift the image of computing for young girls
    - The “Running on Empty” report – a state by state analysis of the extent to which states have learning standards in computing
  - AP Computer Science reform
    - The development of the new CS Principles course
    - Getting 100+ universities to agree to offer college credit
    - Setting up the non-profit to anchor the needed public private partnership to scale the effort to 10,000 teachers and 10,000 high schools
Summary

• ACM is increasingly international in its ...
  – Leadership
  – Membership
  – Core scholarly work
  – Presence and visibility

• ACM is increasingly relevant in key US discussions
  – Technology policy
  – Education policy
    • Seeing real computer science exist at the secondary (pre-college) level
    • Seeing real computer science count
Thank You

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