USC-CSE Highlights

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USC-CSE Highlights, 1999

- New Affiliates: C-Bridge, Chung-Ang U (Korea), Draper Labs, Fidelity, Hughes Networks, Microsoft
- COCOMO II book rollout June 2000
- New PhD’s: Sunita Chulani (IBM Research), June Lee (USC-ISI)
  - Chulani: Best Paper of ISPA/SCCEA 1999 Conference
- Neno Medvidovic wins NSF Career Grant
- Barry Boehm named to Cross Talk Top 10 in History of Software
- Ellis Horowitz becomes Director of USC Distance Education Network
- Developed MBASE Electronic Process Guide
- Converging on commercially supported WinWin groupware with GroupSystems.com
- Established major summer internship program
- Hosted NSF software Engineering Research Strategies Workshop
Acknowledgements: USC-CSE Affiliates (30)

- Commercial Industry (11)
  - C-Bridge, EDS, Fidelity, Hughes, Lucent, Microsoft, Motorola, Rational, Sun, Telcordia, Xerox
- Aerospace Industry (10)
  - Boeing, Draper Labs, GDE Systems, Litton, Lockheed Martin, Northrop Grumman, Raytheon/East, Raytheon/West, SAIC, TRW
- Government (4)
- FFRDC’s and Consortia (4)
  - Aerospace, IDA, SEI, SPC
- International (1)
  - Chung – Ang U. (Korea)

NSF Software Engr. Research Strategies Workshop

- PITAC Report
  - Need significant boost in IT research
  - Software is too fragile and unpredictable
  - Software research a top priority
- ITR-ITR Report
  - Structure of proposed federal IT research initiative
- 1996 NSF Software Research Program Workshop
  - Set goal of achieving "no-surprise" software
  - Identified research program components
  - Product, process, domain, empirical research
  - Transitioning research into practice
- This Workshop
  - Clarify nature and role of software engineering
  - Identify software engineering research strategies
Role of Software Engineering in IT Research and Systems

Great IT Components + Great SW Engineering = Great Systems

- User Applications
- User Interfaces
- System Scheduling
- Infrastructure
- COTS Components
- Faster change
- Time-to-market pressures
- Marry in haste: no leisure to repent
- Adapt or die (e-commerce)

Future Software Trends

- Increased complexity
  - Everything connected
  - Opportunities for chaos (agents)
  - Systems of systems
- Decreased control of content
  - Infrastructure
  - COTS components
- Faster change
  - Time-to-market pressures
  - Marry in haste: no leisure to repent
  - Adapt or die (e-commerce)
- Fantastic opportunities
  - Personal, corporate, national, global
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<tr>
<th>Event</th>
<th>Date</th>
<th>Details</th>
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<tr>
<td></td>
<td>May 2000 - Annual Affiliates Renewal</td>
<td>May - July - Easy WinWin and MBASE-CMMI Tutorials</td>
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<td>August 24-25, 2000 - SE Practice Workshop</td>
<td>October 24-27, 2000 - COCOMO / SCM 15</td>
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<td>- Theme: Software Cost Modeling and Emerging Technologies</td>
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3/8/00
Software Engr. Practice Workshop
August 24-25, 2000

- Elaboration of successful 1-day 1999 workshop
- Experience summaries of 27 summer interns
  - Allied Signal, Microsoft, SEI, Sun, Telcordia, Xerox, . . .
  - Cisco, Intervu, Netinfo, Netscape, Oracle, RealNetworks
  - Top software product and process lessons learned
- 2000 Workshop: Expand to include
  - Employers' experiences
  - Alumni experiences
- Student resumes for Summer 2000 internships in your notebooks