File Systems and I/O Education

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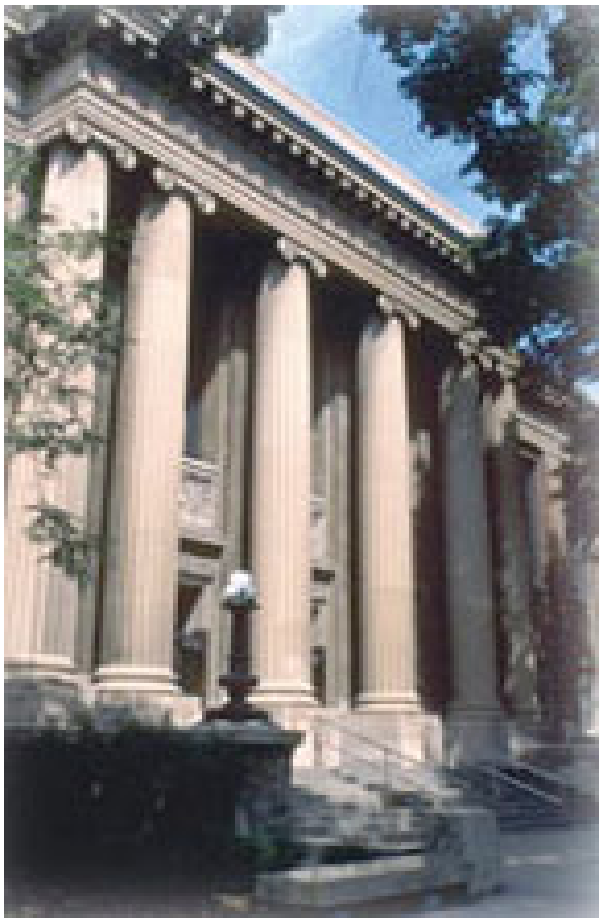

DISC

University of Minnesota

Digital Technology Center

Intelligent Storage Consortium

Supported by

Symantec, Sun Micro, LSI Logic Storage Systems, ETRI/Korea, ITRI/Taiwan

DOE, ONR, Cisco, Intel, NSF

How to Get More Graduate and Undergraduate Students Out?

- Graduate Student Production Is Largely Tied to Research Funding/ Job Market
- Undergraduate Student Production Is Tied More to Job Market
- Both Are Linked Together with Society Perception of Our Discipline

How Can We Do Better?

- More Funding (Extremely Important!)
- More Collaboration on Curriculum Development
- Integrating Research with Education
- More Internships
- Better Advertisement

Introduction of CPATH

- CPATH: CISE Pathways to Revitalized Computing Education (Under Development)
- Goals:
  - Catalyze change in computing education
  - Cultivate leaders who can transform the culture of computing education, and
  - Give rise to organizations that serve as foci and vehicles for changes in computing education

Support Four Types of Projects

- Community Building Grants
- Evaluation, Adoption and Extension Grants
- Transformation Grants
- CISE Distinguished Education Fellow

Other NSF Funding Opportunities

- IGERT: Integrative Graduate Education and Research Traineeship Program
- REU: Research Experiences for Undergraduates
  - REU Cites: 150 New Awards/Year (about 12 in CISE)
  - REU Supplements: 1600 Awards/Year
- CI-TEAM: Cyberinfrastructure Training, Education, Advancement, and Mentoring for Our 21st Century Workforce

Suggestions

- Form a curriculum development team
- Create a central depository for related teaching material
- Increase funding level by actively lobbing at funding agencies
- Create a few visible outreach programs

DISC Research Focuses

- Long-Term Key Management
- Parallel Archiving
- Energy Efficient Mass Storage Systems
- OSD Reference Implementation and Its Extensions