Research Leadership In Advanced Information Technologies To Fulfill The Mission Of The University Of Tennessee

Had Four Core Activities

» Support top ITR related activities through the support of Labs.

» Help UT faculty to develop and fund new ITR projects and laboratories, especially collaboration across disciplines and departments through Challenge Grants.

» Create University-wide programs (e.g. fellowships, faculty affiliates, visiting fellows, invited speakers, workshops and conferences) that produce a wide dispersion of the innovative ideas and help the entire University exploit a broad spectrum of ITR opportunities.

» Help recruit top ranked individuals in ITR.

http://citr.cs.utk.edu/
Recruitment of Talented Faculty

- Jain Huang (Ohio State)
  - Visualization related to scientific simulation
- Lynne Parker (ORNL)
  - Robotics
- Micah Beck (LoCI)
  - Logistical networking
  - Numerical Methods and Grid Computing
  - Already helping in develop the next funding cycle

Workshop and Conference Support

- Bioinformatics “Summit” Spring 2002/2003/2004:
  - Workshop sponsored by CITR and the Center for Genomics and Bioinformatics.
  - Goal: Foster needed interdisciplinary collaboration across UT campuses and ORNL
  - Resulted in new collaboration between Dr. Michael Berry, UTK CS, and Dr. Ramin Homayouni, of the Neurology at Memphis.
  - Lead to the development of the current NSF Science & Technology Center proposal that about to be submitted

- SInRG workshop:
  - SInRG is UT’s unique Grid computing research infrastructure in which all CITR Labs — ICL, LoCI, TIEM — participate
  - CITR Labs introduced Knoxville researchers to basic concepts and UT’s advanced research on Grid computing.
### CITR Collaborations with ORNL

- ICL is working with the Joint Institute for Computational Science (JICS) to help design a world-class Computational Science program to be developed at UTK.
- ICL has an ongoing collaboration with Oak Ridge, Harness, and 2 DOE SciDAC awards.
- LoCI Lab collaboration with ORNL/Princeton Plasma Physics Lab: DOE SciDAC program.
- ICL has joining with the Center for Genomics and Bioinformatics and ORNL in a BISTI planning grant from NIH.
- ICL is working with JICS and ORNL on the NSF funded Active Netlib project.
- Bioinformatics Summits.
- TIEM is collaborating with ORNL in the area of Spatio-temporal Environmental Optimization.
- We have Co-PI the $3M NSF ETF funded effort.
- ICL is part of the Cray X1 Evaluation.
- Contributed to the states EPSCoR proposal and subsequent planning for NSF Cyberinfrastructure.

### CITR’s Funding Critical

- We are at a critical cycle of in our research of prototyping, assessment, and software development; leading to perhaps commercialization.
  - However, this has to be a long-term, sustaining investment, not a one-time, crash program.
- Investment in five Post-Doc’s critical.
- In addition, RCE provides vital funding for the basic support of our research in ICL.
  - We do not derived funds from indirect recovery.
## Overview of CITR supported ITR funding

<table>
<thead>
<tr>
<th>CITR Laboratories last 12 months</th>
<th>Proposals funded or renewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICL</td>
<td>$10,907,767</td>
</tr>
<tr>
<td>LoCI</td>
<td>$1,270,878</td>
</tr>
<tr>
<td>TIEM</td>
<td>$881,754</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$13,060,399</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Affiliated Faculty</th>
<th>Proposal dollars funded</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$660,808</td>
</tr>
</tbody>
</table>

**CITR Lifetime Total**  
$34,180,753

ROI ~ 11 X  
(Based on $3.1M funding for CITR)

---

## Vision And Needs For Continued Success

- CITR Laboratory model has been productive
- Critical in hiring of young talent
- Continue to nurture industry interactions
- Providing a means for overhead of dealing with a team of 50 people
- Goal to participate in every major IT related research initiative
- Long term planning and investment matters

---

http://citr.cs.utk.edu/