

## We Can Offer You

- Rich environment optimized for collaboration between industry and academia
- Cutting edge research opportunities focused on critical business partner technology needs
- Leveraged “force multiplier” to accelerate generation of new ideas for product innovation
- One place to go for access to a broad set of world class university expertise
- An expert source for company staff education and training in emerging technologies
- A targeted, low-risk, and cost-effective complement to selected in-house R&D
- Opportunity to establish high-quality, long-term research relationships without hiring



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**Net-Centric Software & Systems:**  
*A NSF Industry/University Cooperative Research Center*

## Director's Message

Our Net-Centric IUCRC focuses on a collaborative approach of research and development in net-centric software and systems. This allows us to draw on the expertise of industry and academia.

Net-Centric operations offer a computing model for the future. In this paradigm, we no longer view applications as having a fixed set of capabilities: we see them as a set of highly reliable services that are dynamically created from acquired services, then verified and validated in the field in real-time without human intervention.

### Our Current Members

- Southern Methodist University (SMU)
- University of North Texas (UNT)
- University of Texas at Dallas (UTD)
- Boeing
- Cisco
- Codekko
- EDS/HP
- Fujitsu
- GlobeRanger
- Hall Financial Group
- Lockheed Martin Aeronautics Company
- Raytheon Company
- Texas Instruments
- T-Systems



*Krishna Kavi,  
CSE, UNT*

## The Center's Expertise

Net-centric systems encompass many areas within computer science and engineering. The consortium includes internationally recognized researchers and more than 250 highly qualified Ph.D. students. The combined expertise of the consortium faculty covers wide-ranging areas in Computer Science and Engineering.

Academic member institutions also manage NSA-designated Academic Centers for Excellence in Information Security and Assurance.

The IUCRC is currently supporting the following research projects

- Dynamic Service Composition with QoS Assurance
- Improving Multicore Performance – One Core At A Time
- Retargetable Code Generation For Heterogeneous Multi-Processor Computers
- Evaluation Tools for Software Components And Services In Net-Centric and Service-Oriented Systems
- Self-Detection Of Abnormal Event Sequences
- Foundational Requirements for Competency In Software Safety

*"Raytheon has engaged Center members to provide technical resources for both internal and development projects, and sees future value in leveraging the capabilities of the Center to address technology maturation of on-going and future projects."*

Dave Struble, Senior Software Technologist

*"Net-Centric environments provide a framework for full human and technical connectivity and interoperability that allows users to share information they need, when they need it, in a form they can understand and act on in confidence, and in a manner that protects information from those who should not have it."*

Frank Petroski, Chief Engineer  
Joint and Defense Wide Systems Division  
MITRE Corporation

## How to Join Us

A business can join the Net-Centric IUCRC as an Industrial Member. Each Industrial Member is entitled to a representative on the Industrial Advisory Board that decides which projects will be funded from the pooled annual dues. Industrial Members have non-exclusive royalty-free access to research conducted by the Net-Centric IUCRC Other licensing agreements are also available.

For further information about the Center or memberships, please contact Dr. Krishna Kavi, director of the Net-Centric Software & Systems Industry/University Cooperative Research Center at [kavi@cse.unt.edu](mailto:kavi@cse.unt.edu) or (940) 565-2767, or visit our website at [www.netcentric.cse.unt.edu](http://www.netcentric.cse.unt.edu).

*"Lockheed Martin Aeronautics Company recognizes that the formation of the Net-Centric IUCRC is a vital step to fueling innovation in net-centric software and systems and applications development and use of new engineering methods, techniques, and related tools."*

John M. Stratton, Director  
New Business Funds and CRAD Management  
Advanced Development Programs

*\*Cover photograph courtesy of Lockheed Martin Corporation.*