

Institutional Repositories and the Need for "Value-added" Services

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CNI Task Force Meeting,

April 4, 2006



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SMARTech, or **S**cholarly **M**aterials **A**nd **R**esearch @ Georgia **T**ech, is a repository for the capture of the intellectual output of the Institute in support of its teaching and research missions. SMARTech connects stockpiles of digital materials currently in existence throughout campus to create a cohesive, useful, sustainable repository available to Georgia Tech and the world.”

- Public opening: August 1, 2004 with 3,000 objects
- DSpace on Sun Solaris / UNIX (moving to Linux)
- 7,000 objects (03/06, doubled in 17 months)
- ca. 5th largest DSpace, 40+ subcommunities, 70+ colls.
- 190,000 object views / 21,000 searches (past 10 months)

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If you would like to know more about SMARTech or would like to become an adopter, contact [Catherine Iannik](#).



What is SMARTech?

SMARTech (Scholarly Materials And Research at Tech) houses Georgia Tech research in digital format, including:

- Annual Reports
- Conference Papers
- Data Sets
- Electronic Theses & Dissertations
- Learning/Complex Objects
- Models
- Newsletters
- Pre-Prints/Post-Prints
- Proceedings
- Research Reports
- Simulations
- Technical Reports
- Web Pages
- White papers
- Working Papers

SMARTech: Our Approach

- **Why?**

Because despite users telling us they would like to have an IR, they really didn't know how they will interact with it

- **Response to this dilemma?**

We built a “pilot” IR asap to observe users' interaction with it and gain their feedback re: their needs

SMARTech

So where are we today?

- Interviews / Feedback from Faculty
- Determine “value-added” services to develop for faculty, “interweaving IR into GT “information fabric”
- Marketing and Collecting Plans
- Library organizational maturity to support IR services
- Digital Preservation:
 - MetaArchive Preservation Network
 - ASERL LOCKSS - ETD Initiative

Interviews & Feedback

- Faculty on related committees
 - Academic Technologies Advisory Committee
 - Campus Portal Steering Committee
 - Virtual Learning Strategy Group
 - Tegrity Pilot Project Team

- Faculty contributors

- IT staff in the colleges, schools

SMARTech “The Future”

and value-added developments

Services being developed in SMARTech:

- “My DigitalStuff:” Researcher pages
- Syndication of content to portals, dept. web sites
- Levels of Restricted access
 - Managing proprietary and embargoed information
- Document output for P/T, faculty annual profile, CVs
- Co-submission of sponsored research reports
- More software integration, WebCT, EndNote, UPortal
- Improved searching / federated searching
- Citation analysis
- **Current projects:**
 1. College of Architecture
 2. School of Civil and Environmental Engineering

College of Architecture Project

GeorgiaTech College of Architecture
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[written scholarship]

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Research Interests | Bio

John D. Leonard


Research Interests

Technology Policy in Transportation, Intelligent Transportation Systems (ITS), Traffic Operations and Planning, Traffic Engineering and Design, Transportation Safety, Traffic Modeling and Simulation.

Bio

Dr. John D. Leonard is an Associate Chair of the School of Civil and Environmental Engineering and a tenured Associate Professor of Civil Engineering specializing in transportation and traffic engineering. From March 2002 to July 2004, Dr. Leonard served in various senior management roles within the State Road and Tollway Authority of Georgia. In February 2003, Dr. Leonard was appointed Executive Director (interim) by Governor Sonny Perdue. During his tenure at the Tollway Authority, Dr. Leonard oversaw day-to-day operations, human resource management, financial management, process management, information systems, and strategic planning. Through his leadership, SRTA infused continuous quality improvement and business process engineering concepts into ongoing SRTA programs and processes. Dr. Leonard has published over 30 papers, book chapters, and reports and is a nationally recognized expert in the analysis and design of Intelligent Transportation Systems (ITS) and in the analysis and design of coordinated traffic signal systems. Dr. Leonard's research in traffic operations has led to an improved understanding of freeway congestion, and to the deployment of improved strategies for relieving system congestion related to incidents. Dr. Leonard's research in coordinated traffic signal systems has directly resulted in better tools and procedures for reducing surface street congestion. His ideas and tools are used around the country as part of low-cost, immediately applicable techniques for relieving traffic congestion on both freeways and surface streets. Dr. Leonard received his Bachelors of Science, Masters of Science, and Doctor of Philosophy degrees in Engineering in 1983, 1986, and 1991 respectively from the University of California Irvine.

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Books

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Research Interests

Technology Policy in Transportation, Intelligent Transportation Systems (ITS), Traffic Operations and Planning, Traffic Engineering and Design, Transportation Safety, Traffic Modeling and Simulation.

Bio

Dr. John D. Leonard II is Associate Chair of the School of Civil and Environmental Engineering and a tenured Associate Professor of Civil Engineering specializing in transportation and traffic engineering. From March 2002 to July 2004, Dr. Leonard served in various senior management roles within the State Road and Tollway Authority of Georgia. In February 2002, Dr. Leonard was appointed Executive Director (interim) by Governor Sonny Perdue. During his tenure at the Tollway Authority, Dr. Leonard oversaw day-to-day operations, human resource management, financial management, process management, information systems, and strategic planning. Through his leadership, SRTA infused continuous quality improvement and business process engineering concepts into ongoing SRTA programs and processes. Dr. Leonard has published over 30 papers, book chapters, and reports and is a nationally recognized expert in the analysis and design of Intelligent Transportation Systems (ITS) and in the analysis and design of coordinated traffic signal systems. Dr. Leonard's research in traffic operations has led to an improved understanding of freeway congestion, and to the deployment of improved strategies for relieving system congestion related to incidents. Dr. Leonard's research in coordinated traffic signal systems has directly resulted in better tools and procedures for reducing surface street congestion. His ideas and tools are used around the country as part of low-cost, immediately applicable techniques for relieving traffic congestion on both freeways and surface streets. Dr. Leonard received his Bachelor of Science, Masters of Science, and Doctor of Philosophy degrees in Engineering in 1983, 1986, and 1991 respectively from the University of California, Irvine.

Degrees

Ph.D., Engineering, University of California at Irvine, 1991.

M.S., Engineering, University of California at Irvine, 1986.

B.S., Engineering, University of California at Irvine, 1983.

Honors

Dwight David Eisenhower Faculty Fellowship, Federal Highway Administration, 1997.

Certified Toastmaster (CTM), Spring 1996.

Class of 1989 Teaching Fellow, Georgia Tech, Fall, 1994.

Dwight David Eisenhower Faculty Fellowship, Federal Highway Administration, 1994.

Dissertation Fellowship, University of California Transportation Center, 1999-1999, 1990-1991.

David Lee Sherron Memorial Fellowship, UC Irvine, 1991.

Outstanding Civil Engineering Graduate Student, University of California, Irvine, 1985.

University Scholar, UC Irvine, 1979.

Bank of America Achievement Award, 1979.

Books

Leonard, J.D. (2001) "Design of Transportation Facilities," Handbook of Mechanical Engineering, F. Kreith (Ed.), CRC Press.

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Other Guiding Thoughts...

- Think about the information in the IR and apply to other uses
- Document outputs and academic business processes that use this information:
 - P/T document
 - Annual faculty profile update
 - CVs
- Look for more existing applications that use faculty information

Thoughts on IR Goals:

- Development of IRs is moving into a new phase beyond the initial model of store / organize / access
- We need to integrate IRs into the “information fabric” of our campuses’ academic and business processes
- If so, then we must not develop them in library terms, but rather develop the IR in terms of university goals and faculty needs
- “Growth industry” for IRs may be around identifying and implementing constructive ways to use the scholarly information they contain