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Projects in Progress (14)

Innovating IoTs using Ultra Wide-band Technology

For this project, CTG is partnering with the UAlbany College of Engineering and Applied Sciences' Signals & Networks Lab, UAlbany Parking and Mass Transit, and UAlbany Office of Facilities Management to study the feasibility of using ultra-wideband (UWB) technology for public transportation. Ultra-wideband technology is a wireless radio system that uses a small amount of energy to transmit large amounts of data over a wide range of frequency bandwidths, allowing for ranging and localization at the same time. For public transportation, the use of UWB potentially provides numerous benefits to include better tracking of trains and buses and improving the fare payment process by eliminating the need for turnstiles, tickets or cards, and depositing money or swiping for payment.

Understanding the Critical Factors of Food Traceability for Small Farms

With funding from the National Science Foundation Early-Concept Grant for Exploratory Research, CTG and research partner Professor of Biology Gary Kleppel of the Kleppel Lab for Agricultural Ecology and Sustainable Food Production at the University at Albany are analyzing the dynamics among small local farms, food distributors, institutional buyers, and other key factors, and are also identifying the enablers and barriers for small farmers to participate in a whole-chain food traceability system.

Data Visualizations for a Healthier NY

CTG is continuing its data visualization work with the New York State Department of Health (NYSDOH) to create dynamic, user friendly health data visualizations and expand on CTG's work with DOH last summer, in which interns created data visualization prototypes for publicly available data designed to help consumers better evaluate the quality of health care services provided by NYS' managed care plans. Working with interns, this new project will produce a wide range of deliverables for DOH, including refining, expanding, and finalizing the publication of visualizations prototyped in 2015. CTG will develop a full production online tool, and then conduct an evaluation to assess any efficiencies or cost savings achieved by implementing the new process.

Paving the Towpath for Born Digital Records: ERMS Improvement Project

The Center for Technology in Government at the University at Albany is partnering with Digital Towpath (DTP), a nationally recognized digital government shared service comprised of medium and small local governments throughout New York State. CTG will help DTP improve its electronic records management so that local governments can operate more efficiently, easily comply with records management laws, increase public records access for citizens, and be more open.

Smart Cities Smart Government Research-Practice Consortium

The Smart Cities and Smart Governments Research-Practice Consortium is a robust global Smart Cities research community that focuses on innovations in technology, management and policy that change the fabric of the world's cities. Through purposeful networking and connected research, the Consortium members come together to share ideas, new knowledge, research, and practice innovations in the interest of increasing opportunity for all those who live in and work in these cities. The SCSGRP Consortium is based at the Center for Technology in Government at the University at Albany, State University of New York.

Capital Region and Mohawk Cities Working Together to Fight the Blight: Combating Urban Blight through Regional Information Sharing Pilot Project

With funding from the New York State Department of State's Local Government Efficiency (LGe) Program, the

four cities of Schenectady, Troy, Amsterdam, and Gloversville have partnered with the Center for Technology in Government at the University at Albany to address the code enforcement information needs throughout the region in order to support the programs that target urban blight.

Enterprise Content Management for Government

The New York State Homes and Community Renewal (HCR) is integrating core business processes and associated records and other information resources into an agency wide Enterprise Content Management (ECM) system. In collaboration with HCR staff, a team of CTG researchers will use business process mapping and the Center's extensive experience working on government information management initiatives to help develop and pilot an ECM strategy that can be applied across the entire agency.

Building a Policy Informatics Network

The emergence of social media, open government, big data, and other ICT-based forms of public participation, transparency and accountability hold promise for improving democratic processes and tackling intractable societal problems. Thanks to these trends, more sources, kinds, and amounts of information are infused into public interactions and policy decisions. However, these same technological and data-driven forces are significantly challenging traditional forms of governance, policy analysis, and service design. To address these challenges, we need a new kind of collaboration between research and practice and across academic disciplines. CTG is involved in cultivating a new community of inquiry and practice (CoIP) within the public policy research and management arena, which is coming to be known as policy informatics. The goal of policy informatics is to find effective ways to use information and computation to understand and tackle complex problems of society. This goal demands not only new tools and methods, but a re-alignment of interests and relationships within the academic community and across research, education, and practice.

Opening Government: Modeling the Informational Relationships between Government and Society

This CTG project in collaboration with SAP is designed to produce new conceptual and analytical tools for helping government decision makers better understand the ways opening government can shift the informational relationships among government, citizens, and other non-government stakeholders in new and innovative ways.

Opening Government

The growing importance of opening government provides an excellent opportunity for CTG to bring its expertise to bear on the critical challenges of access to and sharing of government data. Our expertise is a result of an extensive body of work that includes research on cross-boundary information sharing, interoperability, and most recently, development of methods to assess the public value of open government initiatives. This latest work is supported by an Early-Concept Grants for Exploratory Research from the National Science Foundation and a grant from Microsoft. The results include an expanded conceptual framework for open government and citizen services, plus a research agenda for addressing the most challenging open government questions facing the academic, government, and non profit communities.

Advancing New York State's Broadband Goals

CTG is supporting New York State in its efforts to ensure broadband is universally available so that every New Yorker can fully participate in the modern digital economy. One of the first steps toward achieving this goal is to clearly understand the existing broadband landscape. In support of activities by the New York State Broadband Development and Deployment Council, CTG is working with the NYS Office of Cyber Security (OCS) on several initiatives to help the state develop a clear picture of where broadband service gaps exist. The results of these initiatives will be used by the state to help guide policy decisions and direct future resources and investments in broadband infrastructure.

Building Information Sharing Networks to Support Consumer Choice Project

The Building Information Sharing Networks to Support Consumer Choice Project (I-Choose Project) is a three-year research activity funded by the National Science Foundation. The research team consists of a network of researchers and practitioners from Canada, Mexico, and the United States. The project aims to develop a data interoperability framework to provide consumers with a wide range of information about how, where, and by whom products are manufactured and brought to market. The project will focus first on development of interoperability among stakeholder communities for the single case of coffee grown in Mexico, and distributed and consumed in Canada and the United States. The lessons learned from this specific case will then be generalized across other product domains.

Smart Cities Service Integration

The Smart Cities Service Integration project is funded by the Social Sciences and Humanities Research Council (SSHRC), a Canadian federal agency that promotes and supports university-based research and training in the humanities and social sciences. The aim of the project is to create a framework for service integration for Smart Cities. The international research team includes researchers and graduate students from the US, Canada, Mexico, and China. The project will produce a series of comparative case studies of Quebec City, Canada, New York City and Seattle, U.S., Mexico City, Mexico, and Shanghai and Macao, China.

Open Government Research Agenda Setting Workshop

Completed Projects (46)

The Role of Public Libraries in Improving Local Open Government Ecosystems

CTG will bring together thought leaders from academia, government, and private and non-profit organizations through a national forum to explore the future role of public libraries as integral partners in local open government initiatives within the context of a community information ecosystem. CTG will work with an Advisory Committee of representatives from public libraries, local governments, and open government experts to develop an initial concept paper on the roles that public libraries can play in local open government ecosystems.

Assessing the Value of Enhanced AirNow Data

The purpose of this project is to assess the potential benefits of using AirNow air quality information that has been enhanced with NASA satellite data from the perspective of selected government agencies, communities, and other stakeholders. A case study approach that represents a variety of contexts for implementing the initiative will be used. In addition, the cases will be supplemented with national or state-level data where available.

National Youth in Transition Database

The National Youth in Transition Database (NYTD) is a new data collection and reporting mandate for states from the Administration for Children and Families (ACF). The NYTD is focused on collecting data on the independent living services provided to youth across the United States. In New York, the Center for Technology in Government at the University at Albany/SUNY is partnering with the New York State Office of Children and Family Services (OCFS) to develop a strategy for collecting data directly from youth.

Understanding Transnational Public Sector Knowledge Networks

The substantive focus of this applied research project, sponsored by the US National Science Foundation, is international collaboration efforts regarding air quality monitoring and reporting initiatives that involve the United States and Mexico, and the United States and China. An international network of native research partners led by the Center for Technology in Government is exploring the issues in the context of these two bi-lateral collaborations. The goal is to analyze the actual experiences of government and partner organizations as the basis for developing both conceptual models and practical tools for effective transnational knowledge sharing.

American Recovery and Reinvestment Act and Technology: A Best Practices Knowledge Sharing Network

The Center for Technology in Government hosted a series of forums with New York State practitioners designed to support the sharing of current and best practices in the use of technology resources to capture, manage, and deliver the data required for Recovery Act (2009) reporting.

Information, Technology, and Governance: A Grand Challenges Research Agenda

This National Science Foundation-sponsored workshop brought together a select group of social and information science researchers and government leaders to lay out a research agenda on the interplay of complexity, value, and risk inherent in the emergence of new information technologies and their adoption by individuals, organizations, and governments.

Exploratory Social Media Project

The overall aim of this project is to provide government professionals with practical advice on policy and regulatory issues associated with the use of social media by government agencies, offer guidance on resolving some of the most pressing concerns identified, and offer suggestions on tools that would help agencies achieve their organizational objectives in respect to social media effectively and efficiently.

North American Digital Government Working Group

The North American Digital Government Working Group (NADGWG) was formed in early 2007 by researchers and practitioners from a variety of institutions and disciplines in Canada, the United States and Mexico to advance electronic government research across geographic and political boundaries in the region. The working group members are developing a comparative and transnational research agenda targeted at questions about intergovernmental digital government initiatives in North America. This group was formed with the support of the National Science Foundation Digital Government Research Program and the home institutions of the members.

Creating an Enterprise IT Governance Framework for New York State Government

The purpose of this project was to generate a set of recommendations for enterprise IT governance in New York State government. The recommendations are based on a framework that was collaboratively developed with key stakeholders within New York State, including state CIOs, state control agencies, and the Office of the Chief Information Officer and Office for Technology (CIO/OFT). Through facilitated exercises, CTG explored two main areas of concern: (1) what value should the enhanced enterprise IT governance framework deliver to New York State and its agencies and (2) what are the necessary changes needed to achieve and sustain this value? The project produced a set of recommendations for New York State and a set of companion reports that draw on a review of IT governance experiences nationwide.

Turkish Ministry of Finance Performance Management in the Public Sector

The purpose of this project was to help the Turkish Ministry of Finance improve their performance planning and assessment budget model prior to implementation. To do this, the Turkish Ministry of Finance sought CTG's expertise to help them learn about existing U.S. government strategies and models for assessing the performance of government agency programs, as well as to facilitate a better understanding of how to effectively develop and apply information management strategies to enable this process.

iGov Research Institute

This project is a four-year effort to develop a sustainable global community of practice among digital government researchers and research sponsors. It includes an international reconnaissance study describing the current

status of digital government research, an annual summer research institute, a framework for several international working groups, and travel support for US investigators and doctoral students to participate actively in international conferences and workshops. An international advisory group assists in setting goals and assessing progress.

Leveraging Investments in the Electronic Commons Project

This project will document lessons learned in the use of advanced communications technologies in the sharing of information on topics of concern about national forests and their neighboring communities. The lessons learned report will allow the United States Department of Agriculture (USDA) Forest Service to leverage their investments in advanced communication technologies by capturing key lessons learned and communicating those key lessons to relevant communities of practice.

Assessing Mobile Technologies in Child Protective Services

The Center for Technology in Government (CTG) in collaboration with the New York State Office of Children and Family Services (OCFS) is in the process of assessing the use of mobile technologies in child protective services (CPS) in New York State. This project has five phases, the first phase started in the summer of 2006 and the final phase concluded in January 2012.

Moving Toward an Electronic Health Record at the NYS Department of Correctional Services

Health care has become one of the largest expenditures for corrections programs nationwide. The purpose of this project was to explore the likely benefits and associated costs of an Electronic Health Record (EHR) for the New York State Department of Correctional Services (NYS DOCS).

NYS IT Workforce Skills Assessment Project

The NYS IT Workforce Skills Assessment Project is designed to gather information about the existing skills and training needs of New York State's IT professionals. The initiative is sponsored by the New York State Chief Information Officer (CIO) Council's Human Resource Committee in partnership with the Governor's Office of Employee Relations (GOER), and the Office for Technology (OFT).

Building a Sustainable International Digital Government Research Community

The goal of this four-year effort is to create a framework for a sustainable global community of practice among digital government researchers and research sponsors. Funded by the US National Science Foundation Digital Government Research Program, the project includes an international reconnaissance study describing the current status of digital government research, an annual research institute, and a framework for several international working groups.

Public ROI – Advancing Return on Investment Analysis for Government IT

The purpose of this project is to develop new methods for defining, measuring, and communicating public returns from information technology (IT) investments in the government sector and to offer government officials recommendations for using these methods in planning and decision making.

Use of Parcel Data in New York State: A Reconnaissance Study

Land parcels are the foundation of many aspects of public and community life. In general, government is the collector of parcel data, and has primary responsibility in land-recording functions. This project presents the findings of a reconnaissance study that investigated the collection, use, and distribution of parcel data in New York State. The purpose of the study, sponsored by the New York State Office of Real Property Services, was to provide information to help shape strategies for broader understanding and more effective use of parcel data in New York State. Findings describe the many attributes of parcel data, illustrate the wide range of uses, express

the value to a variety of stakeholders, and show typical data flows across organizational boundaries.

Web Site Management Using XML: A Testbed Project

As Web sites have grown in size, complexity, and prominence, Web site management, content management, cost, and accessibility have become growing concerns for government agencies. This project was designed to confront these obstacles and to assist government agencies in examining the benefits and challenges of adopting XML and new approaches for managing their Web content.

Library of Congress Collaboration for Preservation of State Government Digital Information

The purpose of this project is to assist the Library of Congress in working with U.S. states and territories to develop strategies for the preservation of significant government information in digital form and to build the collaborative arrangements necessary to implement these strategies.

Exploring the Feasibility of A Digital Government Journal

The last ten years has been a time of growth and formalization for digital government (DG) research. This project explores the need for and feasibility of a new journal dedicated to digital government research. The main goals are to understand the experiences of DG researchers with regard to publishing their work and to gather their opinions about the desirability and focus of a dedicated journal and other publishing strategies.

Modeling Interorganizational Information Integration

Integrating and sharing information across government settings involves complex social and technological interactions. This research begins with a study of information integration initiatives in public safety and environmental management. Based on these projects, researchers will develop and test dynamic models that explain the complex relationships between organizations and technology that can be used to inform other government information integration projects.

Increasing Information Sharing Effectiveness: A Capability Assessment Model for the Justice Enterprise

The justice enterprise requires effective information sharing. Those responsible for planning and implementing information sharing and integration initiatives need effective tools to answer two key questions: *What is the current capability for sharing and integrating information in the organizations involved?* and *How can these organizations build higher levels of sharing and integration capability?*

This project developed a Capability Assessment model for the justice enterprise to assess information sharing capability within and across justice agencies. *Sharing Justice Information: A Capability Assessment Toolkit* assesses capability in a way that can be customized and designed for a wide variety of contexts. It provides an enterprise-wide approach for assessing where capability for sharing information exists and where capability must be developed. The results of the assessment can help determine how to fill gaps in capability both within and across organizations.

State-Local Internet Gateway: Prototype Project

State and Local Governments are connected through a growing number of computer networks to conduct service and information transactions. This project is creating a prototype Internet Gateway that will test and evaluate mechanisms for government to government (G2G) business relationships among state and local government organizations in New York State.

Turning to Digital Government in a Crisis: Coordinating Government's Response to the World Trade Center Attacks

The World Trade Center attack and its aftermath placed an extraordinary set of demands on government. This preliminary research study found that the effective use of a variety of information technologies helped government agencies respond to the crises and ongoing recovery demands of the attack.

The Granting Agency of the Future

This project examined the challenges facing government agencies that fund research. It developed a vision of the ideal research enterprise and a supporting research and action agenda to help achieve it.

E-Government: Creating Tools of the Trade

One of the key promises of e-government is a reinvented government that includes better customer service, increased efficiency, and greater citizen participation. This program of work is generating practical tools to support e-government work at all levels of government. They include research reports, Web-based tools, and practical guidelines on the strategies, policies, and technologies that contribute to effective e-government.

Gateways to the Past, Present, and Future: Practical Guidelines for Electronic Records Access Programs

Increasing demand for direct access to electronic records requires a new understanding of the design and management of electronic records access programs. This project developed a set of practical guidelines to support the design of access programs that meet user needs and organizational demands.

New Models of Collaboration for Delivering Government Services

Governments around the world are experimenting with new organizational forms for the delivery of public services. This project is a multinational research study focused on the benefits, barriers, and results of these innovative service delivery collaborations.

Knowledge Networking in the Public Sector

This study examines the formation and operation of knowledge networks in the public sector. The research is based on seven empirical cases involving groups of agencies in New York State. In each case, agencies are engaged in innovations that depend on sharing knowledge and information across multiple organizations. We identify the dimensions of success and how organizational, technological, and political factors influence results.

Developing a Business Case for the Integration of Justice Information

Improving justice information integration can be a difficult and expensive proposition. This project developed a guide for creating the kind of persuasive business case needed to mobilize the required resources and commitment. It includes guidance for both preparing and presenting the case.

The New York State Homeless Information Management System

Evaluation of programs and services for homeless people requires access to a broad range of information. This project developed the Homeless Information Management System (HIMS) prototype to test the viability of integrating data from multiple data sources to evaluate program performance and identify best practices. The project illuminated the challenges organizations face when creating an integrated resource to support evaluation, decision making, and planning.

Kids Well-being Indicators Clearinghouse

Making sure that New York's more than 4 million children grow up to be healthy, happy, productive adults is no easy task. The Kids Well-being Indicators Clearinghouse (KWIC) project was designed to make vital childhood statistical information more timely, accessible, and usable by the community that serves children and families.

Models for Action: Developing Practical Approaches to Electronic Records Management and Preservation

Traditional system design methodologies do not give adequate attention to the creation, integration, management, and preservation of electronic records. This project was designed to produce generalizable tools to incorporate records requirements into the design of new information systems.

Designing the Digital Government of the 21st Century: A Multidisciplinary Workshop

The National Science Foundation's Digital Government Program supports innovative research to improve government performance through the advanced use of information technology. A multidisciplinary workshop was held in October 1998 to help define the Digital Government Program's research agenda. The workshop highlighted how practical needs of government represent a compelling social and information science research agenda.

Education, Outreach and Training: Partnership for Advanced Computational Infrastructure

Supercomputing research turns up innovative solutions that may hold promise for some of the data management and analysis challenges facing government. This partnership project works to identify, develop, and disseminate the results of advanced technology research for potential use in the public sector.

Using Information in Government Program

Every day people inside government use information to develop policies, make decisions, evaluate programs, and deliver services. This program investigated seven state and local government projects that involved various information use issues. The study focused on how information policies, data standards, costs, skills, strategies, and technical tools were used in these public sector projects.

The NYS Internet Services Testbed

Seven state and local agencies participated in this project designed to develop their first Web-based government services. Throughout the process they developed a set of practical lessons that could be used to assist other public agencies using this powerful new medium.

The Internet Technologies Testbed

The primary objective of the Internet Technologies project was to examine and demonstrate the use of the World Wide Web to deliver services to citizens. In this "proof of concept" prototyping effort, the project team investigated security on the Internet and the potential use of the World Wide Web as a universal interface to government services.

Best Practices in State-Local Information Systems

An increasing number of government programs and services demand coordination across levels of government. But information systems that successfully support these intergovernmental efforts are exceedingly difficult to build and sustain. This project involved 150 state and local government participants from eleven information systems projects in New York State. It identified the diverse service delivery issues facing state and local governments, described the characteristics of ideal state-local information systems projects, and recommended policies and practices to help these projects succeed.

Creating a Statewide Spatial Data Repository and GIS Data Cooperative

Nearly every state agency and all local governments rely on spatial data to support their public service programs. This project focused on tools and policies for interagency geographic information sharing, including a prototype meta data repository, an inventory of spatial data resources, and policy and management recommendations for a permanent data cooperative.

Balancing Environmental Quality and Economic Vitality in the Adirondack Park

Anyone with a plan to develop real property in New York's six million acre Adirondack Park needs information or a permit from the Adirondack Park Agency. This prototyping project combined digital imaging, databases, geographic information, and work flow technologies into an "electronic reference desk" to improve the permitting process.

Groupware Testbed

The Center's first technology testbed project investigated "groupware" products which support team-based organizations and work assignments. Several state agencies tested and evaluated tools to support work flow, document management, project management, and "any time, any place" meetings.

Helping Small Businesses

Each year, about 33,000 business entrepreneurs call New York State for information about permits required to establish a small business. In 1993, most callers encountered busy signals and had to wait to speak to a staff member in order to receive the information they needed. This project built and evaluated a prototype voice recognition/response system to allow callers the convenience of 24-hour direct access to permit information.

Making Psychiatric Assessments in Emergency Rooms

Over 100,000 people receive emergency psychiatric services in New York State each year. Yet research shows there is substantial variability in the decision to refer patients for psychiatric assessment, admit them to inpatient care, or release them to the community. This project developed a prototype decision model to help hospital emergency personnel avoid inappropriate admissions and discharges, reduce errors, and improve the use of hospital resources.

Improving Customer Service Through Title Imaging

New York State issues about four million vehicle titles each year. In 1990, vehicle owners waited up to 120 days for titles to be issued. This project combined process reengineering, imaging, and work flow technologies to show how the number of processing steps could be cut in half and the entire process reduced to 30 days.