RAMESH KOLLURU, PH.D.

VICE PRESIDENT FOR RESEARCH, INNOVATION, AND ECONOMIC DEVELOPMENT UNIVERSITY OF LOUISIANA AT LAFAYETTE

LAST UPDATED: OCTOBER 22, 2018

1. PROFESSIONAL APPOINTMENTS

- 2017- Professor (Tenured), School of Computing and Informatics, University of Louisiana at Lafayette (UL Lafayette)
- 2014- Vice President for Research, Innovation and Economic Development, UL Lafayette
- 2012-2014 Interim Vice President for Research, UL Lafayette
- 2012-2014 Site Director, National Science Foundation (NSF) Center for Visual and Decision Informatics, UL Lafayette
- 2007-2014 Executive Director, National Incident Management Systems and Advanced Technologies Institute, UL Lafayette
- 2007-2012 Assistant Vice President for Research, UL Lafayette
- 2002-2014 Director, Center for Business and Information Technologies, UL Lafayette
- 2009-2016 Associate Professor (tenured), School of Computing and Informatics, UL Lafayette
- 1999-2008 Assistant Professor, Department of Computer Science, UL Lafayette
- 1998-2002 Associate Director, Apparel-Computer Integrated Manufacturing Center, UL Lafayette
- 1996-1998 Research Scientist, Apparel-Computer Integrated Manufacturing Center, UL Lafayette

2. HONORS, AWARDS, UNIVERSITY SERVICE, & COMMITTEES

- 1) *Member*, Federal Emergency Management Agency (FEMA) National Advisory Council, Appointed by FEMA Administrator Brock Long, pending approval of The White House (2018-2021)
- 2) *Commissioner,* Louisiana Cybersecurity Commission, Appointed by Governor John Bel Edwards, State of Louisiana, per directive in Executive Order Number 17-31 (2018.)
- 3) *Trustee,* Lafayette Public Innovation Alliance, Appointed by Lafayette Mayor-President Joel Robideaux, a 5-member public trust, pursuant to State Law (2018.)
- 4) *Executive Committee and Chair of Technology & Innovation Committee*, Louisiana Supply Chain and Transportation Council, established during the 2017 Regular Session of the Louisiana Legislature, SCR99 (2017-current.)

- 5) *Member, University President's Cabinet* (2012-current.)
- 6) *Ex-officio Member*, Innovation and Research Advisory Council (2014-current.)
- 7) *Ex-officio Member*, Graduate Student Success and Retention University Committee (2016-current.)
- 8) *Member*, School of Computing and Informatics Research Committee (2016-current.)
- 9) *Member*, UL Emergency Executive Management Team (2012-current.)
- 10) *Faculty Executive Sponsor*, Ragin Cajun eSports Club (2017-current.)
- 11) *Executive Committee*, Lafayette Economic Development Authority Board of Directors (2017-current.)
- 12) *Executive Committee*, Executive Board of Directors, OneAcadiana, a 9-parish regional economic development organization (2016-current.)
- 13) *Co-Chair*, Campaign Cabinet, United Way of Acadiana (2017-current.)
- 14) *Member*, Executive Committee, United Way of Acadiana (2016-current.)
- 15) *Member*, Lafayette Economic Development Authority Board of Directors (2016-current.)
- 16) *Member*, Community Working Group, Interstate 49 Lafayette Corridor (2016-current.)
- 17) *Member, Executive Committee, Water Institute RESTORE Act Center of Excellence* (2015-current.)
- 18) *Member*, Comprehensive Economic Development Strategy, Acadiana Planning Commission (APC), US Economic Development Administration (2016-current.)
- 19) *Commissioner*, Louisiana Immersive Technologies Enterprise (2015-2017); (Chairman, 2016.)
- 20) *Executive Council,* Louisiana Universities Marine Consortium (Chair, 2012-2014.)
- 21) *Invited Speaker*, The <u>White House</u> for President Obama's launch of the "<u>US Ignite</u> <u>Broadband Initiative</u>" in 2015 and again in 2016 in recognition of innovations in technology, healthcare and homeland security. US Ignite is an initiative of NSF and the White House Office of Science and Technology Policy.
- 22) *"Honorary Cajun,"* designation by former Mayor/Lafayette Parish President Joey Durel for contributions to Acadiana through technology and innovation leadership.
- 23) Served on external review panels to evaluate funding investments of the National Science Foundation, specifically the Directorate for Engineering's Partnerships for Innovation (PFI) program as well as the Division of Human Resource Development's Centers for Research Excellence in Science and Technology (CREST) program.
- 24) Served as an international expert on the panel to review the International Centers of Excellence in Chile, at the invitation of the Chilean Government and the Corporación de Fomento de la Production (CORFO) in Chile, in 2013, and again in 2015.

- 25) *Member*, UL Lafayette Presidential Transition Team, Research and Economic Development Taskforce (2008.)
- 26) *Governor's Technology Leader of the Year*, State of Louisiana (2007.)
- 27) *Board of Directors*, Greater Lafayette Chamber of Commerce (2007.)
- 28) *Board of Directors*, International Trade Development Group (2004-2007.)
- 29) *ACIM/[TC]²/BoRSF Professorship* (September 2001 June 2013.)
- 30) *AAMA/BoRSF Professorship of Manufacturing* (September 2000 June 2013.)
- 31) *"20 Under 40:* 20 future leaders to watch in Acadiana under 40 years of age" (2006.)

3. ACADEMIC TRAINING

- Ph.D., Computer Science (GPA: 4.0/4.0), May 1996, University of Louisiana at Lafayette formerly University of Southwestern Louisiana (USL), Lafayette, Louisiana.
- M.S., Computer Science (GPA 4.0/4.0), May 1995, UL Lafayette, Lafayette, Louisiana.
- B.S., Mechanical Engineering, May 1992, Osmania University, India.

4. ACADEMIC AND RESEARCH LEADERSHIP EXPERIENCE

2014-current Vice President for Research, Innovation and Economic Development, UL Lafayette

2012-2014 Interim Vice President for Research, UL Lafayette

Primary Responsibilities:

- Provide executive leadership for all aspects of faculty, staff and student engagement in the research mission of the University.
- Oversee the direction and strategic planning related to institutional goals; research, scholarship and creative works; public service and community engagement; and physical plant development, aligned with realizing the research mission of the university.
- Lead the activities of the University research centers and institutes as well as academic colleges as related to faculty and student research, scholarship and creative works.
- Develop and recommend campus-wide policies, programs and incentives, aligned with realizing the research mission of the university.
- Build alliances with business and governmental entities that lead to increased resources for the University, including prioritizing and promoting research as well as identifying national trends in which the University should participate.
- Direct efforts of the Office of Research and Sponsored Programs, the Office of Research Integrity, and the Office of Innovation Management, and the including oversight of technology transfer and economic development activities.
- Serve on state, regional and national boards and committees directed to the promotion and support of research and economic development, and overseeing the University Research Park.

Key Accomplishments:

- <u>Master Plan for Research: Vision 2020</u>: Led a comprehensive strategic planning effort involving several internal and external stakeholders of the University of Louisiana at Lafayette and more than a year of self-assessment, work and study. Developed during 2013-14, "*Master Plan for Research: Vision 2020*" presents a *bold* vision to transition the university to a Tier 1 research university by the Year 2020, and enhance the university's research and scholarly profile nationally and globally.
 - Three high-level strategic Vision 2020 goals include (1) generating \$100M in annual R&D expenditures; (2) graduating 100 doctoral students per year; and (3) creating 10 new start-up companies and/or collaborating with 10 new businesses annually through the university's research, innovation and entrepreneurial activities. This vision and annual goals are now reflected in the University's Strategic Plan 2015-2020. The first of the three goals has been achieved 2 years ahead of schedule.
 - Central to decisions, investments, and behaviors, this dynamic plan provides a top return on investment to the University's key customers (undergraduate and graduate students, staff, faculty, alumni, donors, funding agencies, government and industry partners, Board members) and has already resulted in tremendous progress, strong public-private partnerships and enhanced resources.
 - Engaged faculty, staff, and students in all aspects of the "bottom-up" strategic planning and execution, program and infrastructure development for research, scholarship and innovation to meet business and industry needs, and priorities for social, cultural, and economic development of Acadiana and Louisiana.
 - Identified and strengthened 6 signature areas of priority for the university including

 Life Sciences, Healthcare & Lifespan Development; 2.) Digital Media, Computing
 & Smart Systems; 3.) Energy, Economics & Sustainability; 4.) Coastal, Environmental
 & Water Management; 5.) Advanced Materials & Manufacturing; and 6.) Louisiana
 Arts, Culture & Heritage. Grew research funding, secured over \$10M in funding to
 hire faculty and support students in these areas from grants, gifts, and other
 sources; initiated cluster/strategic hires in these areas. Established and funded a
 Research Institute in each of these signature priority areas to foster the ability of
 our faculty to solve societal grand challenges, to enhance the university's global
 reputation in select areas of excellence, and to improve funding opportunities from
 federal agencies, industry, and donor community.
- <u>University's 2015-2020 Strategic Plan</u>: Leading the implementation of the University's 2015-2020 Strategic Plan, as it relates to fostering research and scholarly activities of faculty; creating transformational learning experiences for undergraduate and graduate students; and advancing local, regional and global communities through the creation and dissemination of knowledge.
- <u>Continuous Assessment and Improvement</u>: Utilizing data-driven approaches to allocate and reallocate resources to fuel the implementation of the Strategic Plan. Established a *Research and Innovation Scorecard* with Key Performance Indicators (KPIs) to track annual unit-level performance and performance-based budgeting to maintain a culture

of continuous assessment and improvement. Conducted annual in-depth reviews of the Master Plan for Research and the Strategic Plan to determine progress, update constituents, adjust for changing landscape and capture new opportunities. These synergistic Plans and the Scorecard - serving as systems to support continuous measurement and improvement - drive and inform campus-wide program prioritization to advance the university's progress, accountability, credibility, potential to reallocate resources, evaluate and enhance programs through a process of continuous improvement. The plans, and the audacious goals contained therein, foster a culture of entrepreneurship, innovation, measured risk-taking, and openness to change.

- <u>Unprecedented R&D Growth</u>: As a member of the President's cabinet, worked with administrators, academic deans, faculty, and research leaders to enhance the culture of research and growing externally funded research.
 - Under my leadership, UL continues its growth in R&D funds, as reported by NSF, increasing from <u>\$61.8M</u> in 2013 to <u>\$100.956M</u> in 2017, an increase of <u>63%</u>. Between FY 2013-2017, the number of patent applications grew by <u>300%</u>.
 - In five years, we increased the amount of federal funding by <u>117%</u> and rank in the <u>Top 15</u> universities in the US in the % of industry funded research.
 - Achieved more than <u>100%</u> of Strategic Goal #1, <u>73%</u> of Strategic Goal 2, and <u>100%</u> of Strategic Goal #3 with the Strategic Plan 2020 goals, with more than 2 years remaining. By Fall 2017, achieved over 84% of the 2020 targets on the KPI Research Dashboard used to track progress, accountability measures, and strategic plan performance metrics.
 - Brookings Institution has recently ranked UL Lafayette <u>9th best 4-year public</u> <u>university in the US</u> for conducting valuable research that fosters social mobility, extending social opportunity to students from underprivileged backgrounds.
 - Based on 2016 data, UL Lafayette is ranked 13th of all public universities in the US, in terms of the percentage of research funded by business and industry, as reported to the National Science Foundation.
- <u>Support Productivity of Faculty Engaged in Research, Scholarship, Innovation, and Entrepreneurship</u>: Focused extensive efforts on creating policies, programs, incentives and an environment that nurtures research and fosters innovation. Developed campus-wide research policies that promote a culture of research, cross-disciplinary research; incentivize faculty for pursuing external research funding and including support for graduate and undergraduate students.
 - Incentives for Research: Developed the Research Investment / Indirect Costs Return Policy to incentivize faculty for generating external research funds, with an emphasis on generating federal funding; applied research focused on solving industry problems; and inclusion of funds for graduate and undergraduate students. Further, developed and promulgated the Research Salary Incentive Program (RSIP), a new incentive mechanism by which the University may provide incentive payments to academic faculty securing external funding to cover a portion of their academic year salaries. Created, hired and embedded College Research Coordinators

within academic colleges to support faculty members in identifying funding opportunities and developing research proposals.

- *Win-Win Model for Innovation*: Significantly overhauled the Intellectual Property (IP) Policy to facilitate the development of a win-win and equitable model for distribution of revenues. Expanded the policy to distribute revenues not only to the inventors, but also to their supervisory units including departments, academic deans as well as the office of the Provost/President in an effort to enhance support for the culture of innovation (named the policy the *Dean Carlson Policy on IP Proceeds Distribution*, in the honor of a former Dean of the College of Education who proposed the idea).
- Support for Entrepreneurship: Led efforts for the development of a culture of innovation as well as inventor- and industry-friendly policies for technology licensing, intellectual property protection, commercialization, and royalty distribution. Develop a standard 2-page Intellectual Property (IP) FastStart Licensing Agreement, pre-approved by legal, which allows partners to retain IP and the university to disseminate results. The IP Policy and FastStart Agreement both reduce the overhead rates for industry-sponsored research. Facilitated the development of academic curricula and support for entrepreneurship, as well as economic development of a first-of-its kind faculty and student business accelerator, called "AcceleRagin," in partnership with the community to focus on entrepreneurship and social enterprise, providing an outlet for research and knowledge to be applied for public good and social benefit.
- *Funding for Faculty Development and Advancement*: Funded the Faculty Travel Grants program through the Provost's Office to help faculty and their undergraduate and graduate students travel to conferences to present research, network with peers, and promote scholarly activities. Also established a dedicated fund to support faculty travel to meet federal agency program managers to enhance funding opportunities.
- Funding for Regional Workforce Needs: Generated a \$4.5M grant from the State Louisiana Department of Economic Development to support the School of Computing and Informatics – primarily to hire additional faculty members and provide funds for student enhancement - to help meet the growing workforce needs within the technology sector in the region.
- Recognition of Research, Scholarship, Innovation, and Entrepreneurship: Developed the annual Research and Innovation Awards celebration to recognize researchers responsible for enhancing the University through external R&D funds; mentorship of doctoral students; support for undergraduate research; commercialization of patents and inventions; service on research committees, among others. This event also recognizes established senior faculty and promising junior faculty from each academic college for enhancing university's national reputation through prestigious research and scholarly works.

- <u>Internal & External Collaborations for Shared Governance</u>: Consult with University Council, Deans Council, Faculty Senate and Council of Center Directors on various issues, challenges, opportunities and priorities related to growing the research enterprise. Continue to champion the growth of the Graduate School and generate the resources necessary to increase the number and quality of graduate programs. Established the *Innovation and Research Advisory Council* (IRAC) comprised of a faculty member from every college, researchers and community leaders to seek counsel from a broad set of stakeholders, develop consensus on initiatives, policies, and goals, and support programmatic implementation.
- <u>International Collaborations</u>: Led the University's efforts in establishing 24 R&D Memoranda of Understanding (MOUs) with several Universities from Mexico, Canada, France, India, China, Thailand, Singapore, and Finland. Leveraging the university's Francophone heritage and global reputation in energy, culture, and computing, these MOUs focus on expanding the university's efforts to recruit high-quality undergraduate and graduate students, providing study-and-research abroad opportunities for UL Lafayette students, recruit post-doctoral researchers, as well as strengthening bilateral research collaborations.
- <u>Student Engagement with the Campus and Community</u>: Facilitated several initiatives to enhance undergraduate and graduate student engagement in research and innovation within the campus and the broader community.
 - Prioritized Undergraduate Research: Led the campus-wide effort to institutionalize the culture of undergraduate research - a high-impact practice for student engagement, retention and success that instills in students a lifelong passion for discovery and scholarship - through the establishment of the Louisiana Council of Excellence in Undergraduate Research (La CoEUR). In just 4 years since inception, this initiative has had a profound impact on the institution and the students it serves, with undergraduate research projects now pursued in every discipline within every academic college. The Council reports 100% retention and completion rates for students involved in UG research. Undergraduate Research is one of the potential candidates for the University's on-going QEP process.
 - Undergraduate Research Showcases: Support and serve as the Executive Sponsor annually for the Fall Undergraduate Research Conference and the Spring UL System Academic Summit – a showcase for UG research. Provide financial award for the Outstanding Undergraduate Mentor and Outstanding Undergraduate Researcher.
 - *Student Internship Program:* Facilitated the creation of an internship program between CGI (a Top 5 IT services company that I helped recruit to Lafayette) and the School of Computing and Informatics. More than 40 undergraduate and graduate students from UL are involved in these internships every semester. Likewise, created a consortium agreement with several oil and gas, and geosciences companies and the University's School of Geosciences to establish a successful *Summer Internship Research* (SIR) program.
 - *eSports Club:* Working with over 100 undergraduate and graduate students on the establishment of an eSports Club at UL Lafayette, as an Executive Sponsor. This Club

will create an opportunity for students to participate in national varsity eSports competitions representing the university, while creating a sense of "campus community" for students enthusiastic about video-gaming and digital sports.

- Graduate Student Support: Championed the effort to enhance graduate research assistantship funding levels for graduate students, including the on-going efforts to establish a Statistical Resource Research Center. Provided funding for this center, which will provide graduate students pursuing doctoral dissertations and master's theses, with statistical tools, software, and consultative expertise that they need to succeed in their research pursuits. Working on enhancing the funding for the Graduate Student Organization (GSO) to enhance graduate research opportunities and support. Support the annual University Graduate Student Research Summit and Student Paper Competition, as well as specific such initiatives within the Department of English, and the College of Education.
- Support for Entrepreneurship: Pioneered the development of a first-of-its kind faculty and student business accelerator, called "AcceleRagin," in partnership with the community to focus on entrepreneurship and social enterprise, providing an outlet for research and knowledge to be applied for public good and social benefit. Fully funded the establishment of the Megapreneurship Lab (in partnership with the College of Business) to provide an on-campus venue for university students to engage in entrepreneurial activities.
- *TRIO Programs*: Serve as the Executive Sponsor and Congressional liaison for the University's TRIO, Upward Bound, Veteran's Upward Bound and other affiliated Special Services programs to support students from under-represented, minority, and low-income populations.
- *Funding for Student Recruitment and Success*: Secured a \$2M grant from the Louisiana Board of Regents, *Workforce Innovation for a Strong Economy* (WISE), to expand programs that improve recruitment, retention and graduation of underrepresented undergraduate and graduate students. The grant supports the efforts of the Office of First Year Experience, Student Success Center, and the Graduate School.
- *K-12 Partnerships*: Led UL Lafayette's efforts to establish partnerships with the Lafayette Parish School System and to engage high school students in entrepreneurial activities such as the CajunCodeFest – an annual coding competition. Facilitated collaborative partnerships between several research centers and academic programs of the university with K-12 schools, particularly with Early Career Academies and Magnet Schools, that focus on the areas of technology, healthcare, energy, education, and environment.
- Leading research activities, initiatives, research centers and institutes: Creating signature research initiatives such as *Communities of Interest (Cols) to connect "islands of innovation"* across the various academic units. In addition, strengthening support for existing centers and/or developing new research centers and institutes that promote multi-disciplinary collaborations across STEM and non-STEM units within UL Lafayette and industry. Salient examples include:

- Multi-disciplinary Communities: Launched a Community of Interest (CoI) series to bring researchers from across multiple disciplines and colleges to facilitate conversations and develop collaborations that look at a topic from different vantage viewpoints, informed by differences of their academic preparations, disciplinary perspectives and lived experiences. The inaugural CoI was in the area of *Diversity, Equity & Poverty* in 2016 to reinforce my personal commitment to Diversity, in addition to the University's strategic focus on Diversity. The second CoI focused on *Global Sustainability*, also aligned with my personal commitment to Sustainability, in addition to the University's strategic focus on institutional as well as environmental sustainability. The third CoI focused on the University's extraordinary strengths in *Louisiana Culture and Arts*, while the most recent CoI focused on enhancing our understanding of the *Human Brain & Cognition*.
- Creation of New Research Institutes: Established new cross-disciplinary applied research institutes including the Informatics Research Institute, the Energy Institute of Louisiana, the Institute for Coastal and Water Research and the Institute for Materials Research and Innovation, aligned with the implementation of the University's Master Plan for Research: Vision 2020. In addition, focused on creating alignment between the strengths of the university, with local, regional and national needs for innovation, economic and workforce development.
- *Re-invigorated Research Centers*: Developed a new academic research model for the New Iberia Research Center (NIRC) and the recruitment of nationally- and globallyrecognized research leaders for NIRC, the Picard Center, the Energy Institute of Louisiana, the Louisiana Accelerator Center in partnership with faculty and deans of academic colleges.
- Louisiana Educator Research Consortium: Led and coordinated efforts of faculty at the request of the Louisiana Department of Education to establish UL Lafayette and LSU as host institutions for the Louisiana Educator Research Consortium. Our interest is rooted in the belief that schools with effective, well-prepared teachers are best positioned to disrupt the ill effects of poverty - a chief concern among education and economic development stakeholders. The Consortium will address the cognitive, social, and emotional needs of all students, utilize schooling as a mechanism to curtail social disparities, and uncover the conditions that support teacher candidates' construction of environments that enrich and empower marginalized students.
- *Women and Minority Leadership*: Increased the number of hires of women and under-represented groups hired into leadership positions within research centers, institutes and research initiatives across campus.
- Support for non-STEM initiatives: While Science, Technology, Engineering and Mathematics (STEM) disciplines drive research funding, non-STEM disciplines are equally important in helping students grow into problem-solvers, consensusdevelopers, team builders, and servant-leaders. As such, in addition to establishing the Communities of Interest that serve to enhance research programs within non-

STEM areas, endeavored to grow research within non-STEM disciplines. Salient examples include:

- Collaborations with dean of the College of Liberal Arts on multiple efforts leading to i.) supporting efforts of the Center for Louisiana Studies to digitally archive and protect the invaluable cultural artefacts of Louisiana within the Center, and ii.) partnering with several faculty members in the college to launch the Communities of Interest initiative.
- On-going work with faculty and the dean of the College of Education to i.) identify and support efforts to grow the doctoral program through linkages with the Picard Center and other initiatives, and ii.) establish two research centers within the College the first focused on organizational issues related to sports success, and the second in the life sciences area focused on issues related to integrated physiology, mental and behavioral health and wellness.
- On-going work with faculty and the dean of the College of Arts to i.) support the establishment of the *Mouton-Griffin Center for Living Culture* by entrepreneurially transitioning the Griffin House into a learning community fostering, promoting and encouraging the liberal arts through local culture for campus and the community, and ii.) establish a research center to integrate activities of the Community Design Workshop, the Building Institute and others into a sustainable research program.
- Collaboration with the dean and faculty of the B.I. Moody III College of Business Administration to i.) move the Louisiana Small Business Development Center from reporting to the VP for Research to the dean of the College to enhance faculty involvement, and ii.) to establish *AcceleRagin* – a business accelerator for entrepreneurial faculty, staff and students of UL Lafayette. Currently working with the Dean and several faculty members to i.) help develop and support the Megapreneurship program and the College's plans for developing both undergraduate and graduate curricula in entrepreneurship, and ii.) support the innovative initiative of the college to participate in the B-Labs' *Measure What Matters* 2017 cohort.
- Established strong collaborations with faculty and the Dean of the College of Nursing and Allied Health Professions to i.) fill vacant endowed chairs by building synergistic links between academic programs within the college and research centers including the Picard Center and the Informatics Research Institute, and ii.) support the growth of a research agenda for the College by inviting external advisors and experts from universities with strong nursing research programs.
- <u>Directing efforts of the Office of Research and Sponsored Programs (ORSP) and the</u> <u>Office of Innovation Management (OIM)</u>: Through appropriate personnel hires and continuous process improvements, facilitated the evolution of the Office of Vice President for Research and its affiliated offices into a more *service-oriented, customercentric* organization. Created the Office of Research Integrity (ORI) to ensure

compliance with the highest quality of research standards, appropriate for a modern research university. Salient outcomes include:

- Agency Partnerships: Facilitated multiple campus visits from federal program managers from National Science Foundation, DOD, NASA, DOE, Oak Ridge Affiliated Universities (ORAU), in addition to state agency leaders, federal- and state-level elected officials to help expand faculty research opportunities in both STEM and non-STEM areas.
- Training Support: ORSP continues to provide training on proposal development (NSF CAREER Workshop), resources and staff support needed to develop and submit research proposals, and connect the faculty to funding opportunities. OIM continues to provide faculty resources and services needed for intellectual property development, patent protection, and technology commercialization. ORI continues to engage and support faculty on various university-wide research committees to advance responsible and ethical conduct of research.
- <u>Serving on state, regional and national boards</u>: Lead the university's participation with such economic development entities as OneAcadiana, Lafayette Economic Development Authority, Louisiana Economic Development (LED) and Louisiana Innovation Council.
 - *Economic Development Leadership:* Organized the university's efforts with economic development leaders at the state and local levels to help recruit four major IT companies CGI, Perficient, Enquero, and WAITR bringing 2000 jobs (1400 software, 600 non-STEM) to Acadiana. Since 2014, these companies have added more than 800 jobs, with approximately 50% of those being graduates of UL Lafayette. Most recently, helped recruit a biotech company called CrownBio to New Iberia solely based on the university's strengths in biomedical research, creating the first 25 biotech jobs in Iberia parish.
 - External Relations: Represent the university's research and economic development priorities with the UL System Board of Supervisors; Louisiana Board of Regents Master Plan Research Advisory Council as an ex-officio member of the BOR Support Fund Planning and Steering Committees. Utilized these interactions to help the board members understand the value of growing research and innovation capacity of the university; articulate the university's Research Strategic Plan; seek advise, guidance and approval in developing new initiatives; communicate successes and failures regularly; provide formal progress reports; advocate for new academic programs and research centers, as well as to grow/protect valuable programs. Serve as liaison to Oak Ridge Affiliated Universities (ORAU); Southeastern Universities Research Association (SURA) Council, Association of University Research Parks (AURP), American Public and Land Grant Universities (APLU) Council on Research, among others to advance UL Lafayette's national visibility and recognition.
 - Congressional and Legislative Liaison: Serve the University as the de-facto governmental affairs lead, briefing elected officials, legislators, Congressional leaders at local, state and federal levels on university priorities, and progress. Secured support, including funding, legislation and policy considerations, from these leaders on initiatives important to the advancement of the University.

2011-2012 Founding Site Director, NSF Center for Visual and Decision Informatics, UL Lafayette

- <u>Center Leadership</u>: Played a lead role in the development of CVDI, now recognized the nation's <u>ONLY</u> NSF Center of Excellence in Big Data. CVDI is led by UL Lafayette with 7 other universities (Drexel, Tampere University of Technology, University of Stony Brook, University of Virginia, Brigham Young University, University of North Carolina Charlotte, Amrita University) from three countries and over 30 industry and organizational partners (Intel, CGI, Nokia, Johnson and Johnson, Thomson Reuters, Tieto, mBrain, Cancer Treatment Centers of America, IMS Health, Schumacher Clinical Partners, Children's Hospital of Philadelphia, IMLS, among others) to research and develop innovations in big data.
- <u>National and Global Reputation</u>: The NSF CVDI has now earned the reputation of the largest Industry-University Center in the US, and is the first and only NSF center of excellence in the history of the State of Louisiana.
- <u>Outcomes</u>: The Center has generated more than \$5.1M in external funds from the National Science Foundation and industry since inception to directly support 58 graduate and undergraduate students, engage 26 researchers, produce 45 publications, execute 25 funded projects and generate a 42:1 Return on Investment. Additionally, the Center received supplemental NSF funding for *Research Experiences for Undergraduates* (REU) and *Research Experiences for Veterans* (REV) to provide research opportunities for undergraduate students and veterans.

2007-2012 Executive Director, National Incident Management Systems and Advanced Technologies Institute, UL Lafayette

- <u>Center Leadership</u>: Led the development of NIMSAT Institute as a research center to enhance resiliency of communities to disasters, based on lessons learned during hurricanes Katrina and Rita in 2005. The NIMSAT Institute is now recognized by Federal Emergency Management Administration (FEMA) and the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) as a leader in homeland security and emergency management. Pioneered the development of public-private partnerships, through the development of the Louisiana Business Emergency Operations Center (LA BEOC). Since inception and through appointment as VP for Research, served multiple Governors and their Cabinet as the "Incident Commander" for the LA BEOC.
- <u>National Reputation</u>: Under my leadership, the Institute was able to translate mission to action and to national recognition:
 - Commenting on the Institute's response during Hurricanes Gustav and Ike, Mary Landrieu, then US Senator and Chair of Senate Homeland Security and Governmental Affairs Committee attested, "*The Institute facilitated public-private partnerships that ensured that Louisiana had the necessary resources to manage the disasters, and conducted impact estimates that were instrumental in seeking congressional support.*"

- Commenting on the Institute's response to the BP Oil Spill response, Mark Cooper, then Director of GOHSEP and currently Chief of Staff for Governor John Bel Edwards stated, "Truly the NIMSAT Institute's efforts have laid a solid foundation for future response and fostered a critical partnership that will place both the State of Louisiana and the Nation in a greater position of future preparedness."
- Commenting on the Compendium on Public-Private Partnerships developed by the NIMSAT Institute, Daniel Stoneking, then Director of FEMA Private Sector Office stated, *"There is a positive revolution occurring in emergency management to build upon effective public-private partnerships Every revolution needs a leader and a foundation. Dr. Ramesh Kolluru and his team at NIMSAT are the tip of the spear of that leadership team."*
- Recognition as a "best-practice" by FEMA, leading to the subsequent establishment of the National BEOC at FEMA Headquarters.
- Recognition by the US Chamber of Commerce as "best-practice" in private sector preparedness and engagement.
- Recipient of 2011 National Hurricane Conference "Outstanding Achievement Award."
- Recipient of "2011 Innovation Award" for the Nonprofit sector by the Greater Lafayette Chamber of Commerce.

2002-2012 Director, Center for Business and Information Technologies, UL Lafayette

- <u>Center Leadership</u>: Served as the founding director for the Center for Business and Information Technologies, CBIT, an applied research center recognized as an innovator impacting areas such as healthcare, smart and digital communities, economic development, and workforce development through research and application of computing and information technology.
- <u>State and National Reputation</u>:
 - CBIT is designated as "Strategic Innovation Partner" by the Secretary of the Louisiana Department of Health (LDH), working to improve healthcare outcomes in Louisiana through innovation and healthcare analytics. Over a 10-year period, led the research and development of several IT solutions to improve delivery of healthcare. This partnership led to a \$12.9M contract between UL Lafayette and LDH over a 3-year period 2012-15 to improve the delivery of healthcare in Louisiana that continues under the leadership of Dr. Henry Chu, current director of the Informatics Research Institute.
 - National Acclaim for *CajunCodeFest:* Founded the <u>CajunCodeFest</u>, and hosted the event at UL Lafayette as a signature event that fostered data-driven innovations in healthcare technology. These events resulted in attracting national attention to Lafayette and stimulated significant entrepreneurial activity, resulting in the creation of healthcare innovation. Impressed with Lafayette on his first visit to the region, Todd Park, then CTO of the US tweeted, "Lafayette, Louisiana, a.k.a Silicon Bayou, is the best kept secret reservoir of innovation mojo in the US."

- National Recognition, Invited to <u>speak at the White House</u> for President Obama's launch of the "US Ignite Broadband Initiative" in recognition of accomplishments technology and healthcare innovations. The US Ignite is an initiative of the National Science Foundation and the White House Office of Science and Technology Policy.
- National Recognition, Designation of "Lafayette as the Living Lab for Health Innovation for the US": Worked with <u>The White House Office of Science and</u> <u>Technology Policy</u>, the US Ignite Initiative, the Mayor's Office, and leaders of the healthcare sector within the community. This initiative positions UL Lafayette as a national leader in the development, proof-of-concept validation and deployment of innovations in healthcare, in partnership with public and private sector entities at local, state and federal levels.
- *Statewide Recognition for Economic Development*: CBIT received the coveted "*Governor's Lantern Award*" in the non-profit category, based on its impact on economic development and leadership in achieving the goals of Louisiana Vision 2020, the state's Master Plan for Economic Development. Architected, designed and developed "<u>AccessLouisiana</u>,"that was recognized as the official economic development portal for the State of Louisiana under the administrations of Governor Mike Foster and Kathleen Blanco. This system supported not only the State's economic development and business recruitment efforts, but became a key tool in the recovery and rebuilding of Louisiana's economic recovery after the devastating impacts of Hurricanes Katrina and Rita in 2005.
- Systems for University Admissions and Enrollment Management: Led the design and development of the Capture[™] online application system for undergraduate and graduate students seeking admission to UL Lafayette. This system and its integrated enrollment management processes have been used by UL Lafayette for more than a decade until the recent migration of the university's entire business functions to Banner, new third-party Enterprise Resource Planning (ERP) System. The Capture System has been licensed to a Virginia-based company called Admin701.
- Fostering Entrepreneurship: Established the Louisiana Technology Incubator for Entrepreneurial Success (La TIES), with grant funding of \$600,000 from the National Science Foundation. Louisiana's first technology incubator dedicated to assisting Louisiana's startup businesses with enterprise computing. supercomputing and visualization technologies, La TIES was selected by the NSF Program Manager as one of "NSF Highlights for 2006," agency-wide. In addition, the project provided summer internships at UL Lafavette for eleven high-school students from the Academy of Sacred Heart and other public schools. This project provided high-school students an opportunity to work alongside private sector partners of CBIT in an entrepreneurial setting to understand the applicability of STEM education to business and real-world problems.

2017-current Professor (tenured), School of Computing and Informatics, UL Lafayette 2009-current Associate Professor (tenured), School of Computing and Informatics 1999-2008 Assistant Professor, Department of Computer Science, UL Lafayette

• See Sections 5 - 9 for research and teaching contributions as a faculty member.

5. FUNDED RESEARCH GRANTS AND CONTRACTS

As a faculty member/researcher, I have been the PI or Co-PI of <u>97</u> federal, state and industry funded grants that have generated over <u>\$75M</u> in external funding. Research spans computing, data science, engineering, economic and workforce development, entrepreneurship, social sciences, education, healthcare, business, coastal protection, disaster management, cybersecurity, and homeland security. Funded by <u>55</u> unique federal and state agencies and industry sponsors (with several repeat sponsors), including:

- **Federal Agencies:** Department of Homeland Security (DHS)/Federal Emergency Management Agency (FEMA), National Science Foundation (NSF), US Department of Agriculture (USDA), US Department of Energy, US Department of Education, National Aeronautics Space Agency (NASA), US Department of Defense (DOD)/Defense Logistics Agency (DLA), US Army Research Office, National Institute of Standards and Technology (NIST), and US Economic Development Administration (EDA).
- State Agencies: Louisiana Board of Regents, Louisiana Department of Natural Resources, Louisiana's Governor's Office of Coastal Activities Office of Coastal Protection and Restoration (OCPR), Louisiana Office of Community Development (OCD) Disaster Recovery Unit (DRU), Governor's Office of Homeland Security & Emergency Preparedness (GOHSEP), Louisiana Department of Public Safety & Corrections (DPS), Louisiana Oil Spill Coordinator's Office (LOSCO), Louisiana Workforce Commission, State of Louisiana Governor's Information Technology Initiative (ITI), State of Louisiana Division of Administration, Louisiana Economic Development, University of Louisiana System, Louisiana Department of Transportation and Development Louisiana Transportation Research Center (LTRC) and various offices of the Louisiana Department of Health and Hospitals (DHH) including Medical Vendor Administration (MVA), Office of Behavioral Health (OBH), Office of Aging And Adult Services (OAAS), Office of the Secretary, Office of Addictive Disorders, Office of Citizens with Developmental Disabilities (OCDD), and the Office of Mental Health (OMH).
- **Local Government:** Livingston Parish President-Council, Metropolitan Human Services District.
- Private & Non-governmental agencies: Geocomp Corporation, Inc, Constant Care, Institute of Museum and Library Services (IMLS), Estimatics in the 4th Dimension, National Institute for Hometown Security, Inc. (NIHS), Classroom Ads, LLC., Intelligent Discovery Solutions, Inc., LA 1 Coalition, Inc., James Lee Witt Associates, RTI International, Premiere Performance Systems, LLC., Maritime Institute for Emergency Monitoring and Response, Louisiana Business Incubation Association, Bizzuka, Decyphor Processing Solutions, LLC (d.b.a. Admin.701), Stuller Settings Inc., Johnson and Johnson, Lockheed Martin, Children's Hospital of Philadelphia, Elsevier, Microsoft Corporation, SunGard Availability Services LP, First Call Network, Inc., IMS Health Incorporated, Louisiana Health Care Quality Forum, Louisiana Immersive Technologies Enterprise, The SI Organization, Inc., Thomson Reuters, and Institute of Museum and Library Services (IMLS).

The list of funded projects, including the agency, my role and amount of funding follows:

- 1) *Louisiana Entrepreneurship and Economic Development (LEED) Center*; Funding Agency: US Economic Development Administration; Period: 10/01/18-09/30/23; Total EDA Investment: \$564,250; Total Grant Amount: \$1,128,500; Role: co-PI. PI; Dr. Geoffrey Stewart.
- 2) *Louisiana Occupational Forecasting*; Funding Agency: Louisiana Workforce Commission; Period: 10/01/18-09/30/21; Total Grant Amount: \$520,109; Role: co-PI. PI; Dr. Gary Wagner.
- 3) *Community Economic Development in Underserved Rural Coastal Acadiana Parishes;* Funding Agency: US Department of Agriculture, FY 2018 Rural Business Development Grant; Period: 09/01/2018-08/31/2020; Amount: \$500,000; Role: co-PI. PI; Dr. Geoffrey Stewart.
- 4) *Accelerate Acadiana*; Funding Agency: US Economic Development Administration; Period: 07/01/16-12/31/18; UL Lafayette Amount: \$500,806; Winrock International/University of Louisiana at Lafayette; total grant amount: \$1,454,000; Role: UL Lafayette PI.
- 5) *Workforce Innovation for a Strong Economy (WISE)*; Funding Agency: Louisiana Board of Regents and Community Development Block Grant (CDBG); Period: 01/01/15 12/31/19; Amount: \$2,012,000; Role: PI.
- 6) *5-Year Plan for Increased Production of Graduates*; Funding Agency: Louisiana Economic Development; Period: 7/1/2014-6/30/2024; Amount: \$4,500,000; Role: PI.
- 7) Community Education and Outreach (CEO): An Analytics Platform for Hazard Mitigation, Risk Management and Disaster Declaration Assistance; Funding Agency: Federal Emergency Management Agency (FEMA) through the Louisiana Governor's Office of Homeland Security & Emergency Preparedness (GOHSEP); Period: 01/01/13 – 12/31/15; Amount: \$1,302,628. Role: PI; Co-PIs: R. Gottumukkala, and C. Rives.
- 8) *DHH IT Operations*; Funding Agency: Louisiana Department of Health and Hospitals (DHH), Medical Vendor Administration (MVA); Period: 11/01/12 10/31/15; Amount: \$12,900,449. Role: PI; Co-PI: C. Robinson.

- 9) *CVDI IAB Member Project Fund*; Funding Agency: Private Sector; Period: 07/01/12 06/30/14; Amount: \$410,000. Role: Co-PI; PIs: V. Raghavan, R. Kolluru, C. Cruz-Neira, R. Gottumukkala and R. Benton.
- I/UCRC Phase I: Center for Visual and Decision Informatics (CVDI); Funding Agency: National Science Foundation; Period: 02/15/12 - 01/31/17; Amount: \$413,585. Role: Co-PIs; PIs: V. Raghavan, R. Kolluru, C. Cruz-Neira, R. Gottumukkala and R. Benton.
- 11) *BP Spill Claims Informatics and Analytics*; Funding Agency: Louisiana Department of Public Safety & Corrections (DPS), Louisiana Oil Spill Coordinator's Office (LOSCO); Period: 01/01/11 09/30/13; Amount: \$245,770. Role: PI; Co-PI: R. Gottumukkala.
- 12) Office of Behavioral Health (OBH) Systems Host & Maintain; Funding Agency: Louisiana Department of Health and Hospitals (DHH), Office of Behavioral Health (OBH); Period: 09/01/12 – 01/31/13; Amount: \$39,375. Role: PI; Co-PI: C. Robinson.
- 13) *Traumatic Head and Spinal Cord Injury Service Plan Workflow*; Funding Agency: Louisiana Department of Health and Hospitals (DHH), Office of Aging and Adult Services (OAAS); Period: 07/01/12 – 06/30/13; Amount: \$80,348. Role: PI; Co-PI: D. Mallory.
- 14) *Center for Health Care Innovation and Technology Center (CHCIT);* Funding Agency: Louisiana Department of Health and Hospitals (DHH), Medical Vendor Administration (MVA); Period: 07/01/12 – 03/01/13; Amount: \$5,925,000. Role: PI; Co-PI: D. Mallory.
- 15) *Birth Outcomes;* Funding Agency: Louisiana Department of Health and Hospitals (DHH), Office of the Secretary (OS); Period: 02/01/12 12/30/12; Amount: \$100,009. Role: PI; Co-PI: D. Mallory.
- 16) *Classroom Ads*, Phase 1; Funding Agency: Classroom Ads, LLC; Period: 11/18/11 01/17/12; Amount: \$12,435. Role: PI; Co-PI: D. Mallory.
- 17) *Classroom Advertising Documents (High Level Design & Statement of Work);* Funding Agency: Classroom Ads, LLC; Period: 09/13/11 10/15/11; Amount: \$4,301. Role: PI; Co-PI: D. Mallory.
- 18) Sustainment and Improvement of the Louisiana Business Emergency Operations Center (LA BEOC); Funding Agency: Louisiana Governor's Office of Homeland Security & Emergency Preparedness (GOHSEP); Period: 08/31/11 – 06/30/12; Amount: \$144,587. Role: PI; Co-PIs: D. Mallory, M. Smith, and R. Gottumukkala.
- 19) *Emergency Plan of Care (ePOC);* Funding Agency: Louisiana Department of Health and Hospitals (DHH), Office of Aging and Adult Services (OAAS); Period: 07/01/11 02/28/13; Amount: \$497,904. Role: PI; Co-PI: D. Mallory.
- 20) *Louisiana 5Ps System;* Funding Agency: Louisiana Department of Health and Hospitals (DHH), Office of the Secretary (OS); Period: 07/01/11 12/31/12; Amount: \$72,346. Role: PI; Co-PI: D. Mallory.

- 21) Search Team Asymptotic Convergence During Continuous Document Review (STAC); Funding Agency: Intelligent Discovery Solutions, Inc.; Period: 06/28/11 – 08/31/11; Amount: \$8,640. Role: PI; Co-PI: D. Mallory.
- 22) Louisiana Business Emergency Operations Center (LA BEOC) Activation; Funding Agency: Louisiana Governor's Office of Homeland Security & Emergency Preparedness (GOHSEP); Period: 04/25/11 12/31/12; Amount: \$1,000,000. Role: PI; Co-PI: D. Mallory.
- 23) *OAAS Participant Tracking System (OPTS) Enhancements*; Funding Agency: Louisiana Department of Health and Hospitals (DHH), Office of Aging and Adult Services (OAAS); Period: 04/01/11 06/30/12; Amount: \$70,000. Role: PI; Co-PI: D. Mallory.
- 24) Intelligent Flood Protection Monitoring Warning and Response System (iLevees); Funding Agency: Louisiana's Governor's Office of Coastal Activities, Office of Coastal Protection and Restoration (OCPR) through GeoComp Corporation, Inc.; Period: 11/16/10 – 09/31/12; Amount: \$237,101. Role: PI; Co-PIs: D. Mallory, and R. Gottumukkala.
- 25) Identifying Opportunities for Forest Sector Companies to Participate in the Wood-Based Bio Revolution: A Supply Chain Insertion Approach; Funding Agency: US Department of Agriculture (USDA) through Louisiana State University Agricultural Center (LSUAg); Period: 09/01/10 – 12/31/12; Amount: \$22,879. Role: Co-PI; Co-PI: M. Smith.
- 26) *Contribution of Louisiana Highway One (LA 1);* Funding Agency: LA 1 Coalition, Inc.; Period: 06/05/10 06/30/11; Amount: \$50,000. Role: PI; Co-PI: M. Smith.
- 27) *Office of Aging and Adult Services (OAAS) Systems Enhancements Project*; Funding Agency: Louisiana Department of Health and Hospitals (DHH), Office of Aging and Adult Services (OAAS); Period: 04/01/10 02/28/11; Amount: \$225,000. Role: PI; Co-PI: D. Mallory.
- 28) *Cadre™ Management System*; Funding Agency: James Lee Witt Associates; Period: 02/01/10 01/31/11; Amount: \$37,020. Role: PI; Co-PI: D. Mallory
- 29) Applied Research and Development Services Cooperative Endeavor Agreement; Funding Agency: Governor's Office of Homeland Security & Emergency Preparedness (GOHSEP); Period: 11/15/09 – 12/31/10; Amount: \$574,982. Role: PI; Co-PI: D. Mallory.
- 30) *Louisiana Workforce Supply and Demand Forecast Simulation*; Funding Agency: Louisiana Workforce Commission; Period: 11/02/09 – 06/30/11; Amount: 1,050,768. Role: PI; Co-PIs: D. Mallory, M. Smith.
- 31) Enhancing State Government Energy Assurance Capabilities and Planning for Smart Grid Resiliency; Funding Agency: Department of Energy through the Louisiana Department of Natural Resources (LDNR); Period: 10/01/09 – 07/31/12; Amount: \$513,998. Role: PI; Co-PIs: R. Gottumukkala, D. Mallory, and M. Smith.
- 32) Host and Maintain Access to Recovery (ATR) Systems (ATR-I & ATR-II) and LASIS; Funding Agency: Louisiana Department of Health and Hospitals (DHH), Office of

Addictive Disorders; Period: 09/01/09 – 08/31/12; Amount: \$498,000. Role: PI; Co-PI: D. Mallory.

- 33) *UL Lafayette Emergency Management for Higher Education*; Funding Agency: US Department of Education; Period: 07/01/09 12/31/11; Amount: \$440,286. Role: PI; Co-PI: D. Mallory.
- 34) Economic Impact of Louisiana's Critical Infrastructure and Key Resources Asset; Funding Agency: Federal Emergency Management Agency (FEMA) through the Louisiana Governor's Office of Homeland Security & Emergency Preparedness (GOHSEP); Period: 07/01/09 – 12/15/11; Amount: \$80,000. Role: PI; Co-PI: M. Smith.
- 35) *IT Infrastructure*; Funding Agency: State of Louisiana, Governor's Information Technology Initiative (ITI); Period: 07/01/09 06/30/11; Amount: \$271,270. Role: PI.
- 36) *Participant Services Database*; Funding Agency: Louisiana Department of Health and Hospitals (DHH), Office of Citizens with Developmental Disabilities (OCDD); Period: 07/01/09 09/15/10; Amount: \$199,995. Role: PI; Co-PI: D. Mallory.
- 37) *Centralized Scheduling Module in OMH-IIS*; Funding Agency: Louisiana Department of Health and Hospitals (DHH), Office of Mental Health (OMH); Period: 10/15/08 06/30/09; Amount: \$19,949. Role: PI; Co-PI: D. Mallory.
- 38) Information Technology Technical Assistance for the State of Louisiana; Funding Agency: RTI International; Period: 08/01/08 10/31/09; Amount: 337,500. Role: PI; Co-PI: D. Mallory.
- 39) Community Education and Outreach (CEO): Public Communication and Hazard Data Management Platform Portal; Funding Agency: Federal Emergency Management Agency (FEMA) through the Louisiana Governor's Office of Homeland Security & Emergency Preparedness (GOHSEP); Period: 07/03/08 – 06/30/11; Amount: \$825,000. Role: PI; Co-PIs: D. Mallory, and R. Gottumukkala.
- 40) *Michoud Assembly Facility (MAF) Economic Impact Study*; Funding Agency: NASA/Marshall Space Flight Center; Period: 07/01/08 07/31/08; Amount \$20,000. Role: PI; Co-PI: M. Smith.
- 41) *DOA Spending Information Database (SID);* Funding Agency: State of Louisiana, Division of Administration; Period: 06/23/08 04/29/11; Amount: \$250,000. Role: PI; Co-PI: D. Mallory.
- 42) *ATR (Access to Recovery) Lite*; Funding Agency: Louisiana Department of Health and Hospitals (DHH), Office of Addictive Disorders; Period: 01/01/08 12/31/08; Amount: \$15,000. Role: PI; Co-PI: D. Mallory.
- 43) *AMIGO Visualization Platform*; Funding Agency: Premiere Performance Systems, LLC; Period: 11/15/07 01/31/08; Amount: \$150,000. Role: Pl.

- 44) Assessment of Critical Infrastructure/Key Resources (CI/KR) along Louisiana's Gulf Coast; Funding Agency: Maritime Institute for Emergency Monitoring and Response; Period: 11/01/07 07/31/08; Amount: 100,000. Role: PI.
- 45) *Hazard Mitigation Plan and 3D Model*; Funding Agency: Federal Emergency Management Agency (FEMA) through the Louisiana Governor's Office of Homeland Security & Emergency Preparedness; Period: 09/25/07 09/24/11; Amount: \$157,000. Role: Pl.
- 46) The LONI Institute: Advancing Biology, Materials, & Computational Sciences for Research, Education, & Economic Development; Funding Agency: Louisiana Board of Regents; Period: 07/01/07 06/30/13; Amount: 1,125,060. Role: PI (for UL Lafayette sub-contract); Co-PI: R. Gottumukkala.
- 47) *Access to Recovery (ATR) for MHSD*; Funding Agency: Metropolitan Human Services District; Period: 07/01/07 06/30/08; Amount: \$106,000. Role: PI.
- 48) UL Lafayette Enterprise Applications (Capture, WebERA, IP Tracker); Funding Agency: State of Louisiana, Governor's Information Technology Initiative (ITI); Period: 07/01/07 06/30/09; Amount: \$194,110. Role: PI.
- 49) *Web Administrative Information Database (WebAID);* Funding Agency: State of Louisiana, Governor's Information Technology Initiative (ITI); Period: 07/01/07 06/30/09; Amount: \$209,045. Role: PI.
- 50) *Parallel-GIS: An Open Source GIS Application on the Supercomputers of LITE and LONI;* Funding Agency: State of Louisiana, Governor's Information Technology Initiative (ITI); Period: 07/01/07 06/30/10; Amount: \$284,240. Role: PI.
- 51) *LBIA Support for Louisiana TIES*; Funding Agency: Louisiana Business Incubation Association; Period: 12/20/06 06/30/07; Amount: \$50,000. Role: PI.
- 52) *Regional Marketing Campaign for Louisiana TIES*; Funding Agency: Louisiana Economic Development; Period: 11/10/06 12/15/07; Amount: \$100,000. Role: PI.
- 53) *Access to Recovery (ATR) System Enhancements*; Funding Agency: Louisiana Department of Health and Hospitals (DHH), Office of Addictive Disorders; Period: 09/01/06 08/30/09; Amount: \$1,297,000. Role: PI.
- 54) UL STARS University of Louisiana System for Tracking Assets, Resources, and Students; Funding Agency: University of Louisiana System; Period: 09/01/06 09/30/07; Amount: \$92,000. Role: PI.
- 55) Development of PetaShare: A Distributed Data Archival, Analysis and Visualization System for Data Intensive Collaborative Research; Funding Agency: National Science Foundation (NSF), MRI Instrument Development Program; Period: 08/15/06 – 05/31/10; Amount: \$96,144. Role: PI.
- 56) *The Information Technology Transfer Laboratory (ITTL)*; Funding Agency: Louisiana Board of Regents; Period: 07/01/06 06/30/08; Amount: 62,496. Role: PI.

- 57) Implementation Roadmap for the University of Louisiana System's Automated Reporting System; Funding Agency: University of Louisiana System; Period: 05/15/06 06/30/06; Amount: \$18,000. Role: PI.
- 58) *Software Development Applications*; Funding Agency: State of Louisiana, Governor's Information Technology Initiative (ITI); Period: 04/01/06 06/30/07; Amount: \$114,875. Role: PI.
- 59) *Louisiana TIES: Louisiana Technology Incubator for Entrepreneurial Success*; Funding Agency: National Science Foundation (NSF), Partnership for Innovation (PFI); Period: 03/15/06 02/28/09; Amount: \$600,000. Role: PI. Co-PI: M. Smith
- 60) *Gulf Coast Opportunity Zone (GOZone) Redevelopment Using 3D Modeling*; Funding Agency: Louisiana Department of Transportation and Development, Louisiana Transportation Research Center; Period: 01/01/06 05/31/06; Amount: \$84,500. Role: PI.
- 61) *GRID (Grid Research, Innovation and Development) A New Paradigm for LITE;* Funding Agency: State of Louisiana, Governor's Information Technology Initiative (ITI); Period: 07/01/05 – 06/30/07; Amount: \$655,500. Role: PI.
- 62) Enhancing Louisiana Forest Products Industry Development and Competitiveness; Funding Agency: Louisiana Board of Regents; Period: 07/01/05 – 06/30/07; Amount: 54,105. Role: Sub-contract PI. PI: R. Vlosky (LSU); Co-PI: M. Smith.
- 63) *Extending JIT to Incorporate JIC Scenarios*; Funding Agency: Louisiana Board of Regents; Period: 07/01/05 06/30/07; Amount: 62,400. Role: PI; Co-PIs: M. Smith, and G. Stewart.
- 64) *I.T. Enhancements to Support Teaching, Research, and Patient Care*; Funding Agency: Louisiana Board of Regents; Period: 07/01/04 06/30/06; 75,000. Role: Co-PI, PIs: A. Fort, and L. Bairnsfather (LSU HSC.)
- 65) *LouisianaPetrochem;* Funding Agency: State of Louisiana, Department of Economic Development (LED); Period: 06/01/04 06/30/06; Amount: \$30,000. Role: PI.
- 66) *Enterprise On Demand Content and Component (eOnDeCC)*; Funding Agency: Bizzuka; Period: 05/07/04 12/31/06; Amount: \$5,000. Role: PI.
- 67) *Megasite Development Framework for Louisiana;* Funding Agency: State of Louisiana, Department of Economic Development (LED); Period: 01/27/04 06/30/05; Amount: \$110,000. Role: PI.
- 68) *Capture Software Development Agreement*; Funding Agency: Decyphor Processing Solutions, LLC (d.b.a. Admin.701); Period: 12/10/03 10/10/04; Amount: \$40,000. Role: PI.
- 69) *LouisianaExperts;* Funding Agency: State of Louisiana, Department of Economic Development (LED); Period: 12/01/03 06/30/06; Amount: \$182,500. Role: PI.
- 70) *LouisianaLocate*; Funding Agency: State of Louisiana, Department of Economic Development (LED); Period: 10/01/03 06/30/06; Amount: \$258,750. Role: PI.

- 71) Establishment of the Louisiana Supply Network Education Testbed (LouiSNET); Funding Agency: Louisiana Board of Regents; Period 07/01/03 – 06/30/05; Amount: \$65,640. Role: PI; Co-PIs: M. Smith, P. Meredith.
- 72) Phase 0: A Feasibility Study for the BalancedFlow Nomex Supply Chain; Funding Agency: Defense Logistics Agency (DLA), Defense Supply Center Philadelphia (DSCP); Period: 04/15/03 11/28/03; Amount: \$150,000. Role: PI; Co-PIs: M. Smith, P. Meredith, and W. Masuchun (UL Lafayette); B. Kernodle and C. Jarvis (Clemson University.)
- 73) *Louisiana Commerce Exchange System (LACES);* Funding Agency: State of Louisiana, Department of Economic Development (LED); Period: 01/01/03 06/30/06; Amount: \$187,500. Role: PI.
- 74) *Collaborative E-Business Management Roadmap for Louisiana Businesses (CEM);* Funding Agency: Louisiana Board of Regents; Period: 07/01/02 – 06/30/05; Amount: \$100,000. Role: PI; Co-PI: M. Smith, P. Meredith, and S. Dwivedi.
- 75) *Manufacturing Extension Partnership of Louisiana (MEPoL) Cost-Sharing*; Funding Agency: National Institute of Standards and Technology (NIST), Manufacturing Extension Partnership of Louisiana; Period: 07/01/02 06/30/03; Amount: \$200,000. Role: PI.
- 76) Basic Contract as Partner in the Apparel Research Network Program (ARN II) Program; Funding Agency: Defense Logistics Agency (DLA), Defense Supply Center Philadelphia (DSCP); Period: 03/20/02 – 03/19/05; Amount: \$45,000. Role: PI; Co-PI: A. Steward.
- 77) *Intelligent Intermediaries;* Funding Agency: State of Louisiana, Governor's Information Technology Initiative (ITI); Period: 11/01/01 06/30/07; Amount: \$1,200,642. Role: PI.
- Photochemical Systems for Energy Conservation within Louisiana's Chlor-Alkali Industry; Funding Agency: Louisiana Department of Natural Resources; Period: 09/01/01 – 08/31/02; Amount: \$100,038. Role: PI. Co-PIs: S. Smith (UL Lafayette), T. Foret (Oxilume.)
- 79) *Scalable Information Framework for the Extended Business Enterprise*: Funding Agency: National Science Foundation; Period: 08/15/00 07/31/02; Amount: \$105,444. Role: PI; Co-PIs: P. Meredith, S. Smith, and A. Steward (UL Lafayette), J. Peck, S. Davis, B. Kernodle, and C. Jarvis (Clemson University.)
- 80) *Louisiana Advanced Manufacturing Research Testbed (AMRT);* Funding Agency: Louisiana Board of Regents; Period: 07/01/00 – 06/30/03; Amount: \$124,500. Role: Co-PI; PIs: S. Smith and R. Kolluru.
- 81) *Intelligent Machines on the Factory Floor;* Funding Agency: Louisiana Board of Regents; Period: 07/01/99 06/30/02; Amount: \$125,000. Role: PI; Co-PI: P. Meredith, S. Smith, A. Steward, and K. Valavanis.

- 82) *Louisiana Textile Apparel Retail Consortium for Quick Response*; Funding Agency: Louisiana Board of Regents; Period: 07/01/99 – 06/30/01; Amount \$86,696. Role: Co-PI; PI: P. Meredith, R. Kolluru, S. Smith, J. Robeck, and A. Steward.
- 83) *Modeling, Design and Prototyping of a multi-Degree-of Freedom Robotic Gripper System for Limp Material Manipulation*: Funding Agency: National Science Foundation; Period: 10/01/97 – 09/30/99; Amount: \$189,720. Role: Co-PI; PIs: K. Valavanis, R. Kolluru, D. Gracanin, and S. Smith.
- 84) Design and Development of an Automated Storage and Retrieval System (AS/RS); Funding Agency: Stuller Settings Inc., Lafayette, Louisiana; Period: 06/01/98 – 06/63/99; Amount: \$205,085. Role: PI.
- 85) *Reconfigurable Robotic Grippers: An Attempt to Automate the U.S. Textiles/Apparel Industry;* Funding Agency: Louisiana Board of Regents; Period: 07/01/96 06/30/99; Amount: \$230,000. Role: Co-PI; PI: K. Valavanis, R. Kolluru, D. Gracanin, and S. Smith.
- 86) *Demand Activated Manufacturing Architecture (DAMA) University Research Center*; Funding Agency: Department of Energy; Period: 10/01/95 – 09/30/97; Amount \$619,794. Role: Co-PI; PIs: K. Valavanis, A. Steward, M. Bayoumi, D. Gracanin, S. Smith and R. Kolluru.
- 87) Object Identification, Classification and Avoidance in 3-D Underwater Automated Surveillance; Funding Agency: National Science Foundation; Period: 09/01/95 – 08/31/97; Amount: \$250,717. Role: Co-PI; PIs: K. Valavanis, D. Gracanin, and R. Kolluru.
- 88) Online Fabric Sourcing Database with Data Mining and Intelligent Search; Funding Agency: Louisiana Board of Regents; Period: 06/01/2001 06/30/2005; Amount \$45,675. Role: Co-PI; PIs: J. Robeck, A. Steward, R. Kolluru (UL Lafayette), Y. Chen. J. Chen and T. Summers (LSU.)
- 89) Infrastructure Enhancement for the Development of Supply Chain Management Methodologies; Funding Agency: University of Louisiana; Amount: \$36,000 (2000-2001). Role: PI/PD. PIs: Ramesh Kolluru, Paul Meredith, Stanford Smith, and Al Steward.
- 90) *Textile Life Cycle Waste Management and Resource Recovery Model*; Funding Agency: Louisiana Board of Regents; Period: 06/01/2002 06/30/2005; Amount \$73,168. Role: Co-PI; PI: J. Robeck.
- 91) Planning Grant for the Establishment of the National Science Foundation Center for Integrated Enterprise Research (CIER); Funding Agency: Louisiana Board of Regents; Period: 06/01/2002 – 06/29/2004; Amount \$43,090. Role: PI; Co-PI: S. Dwivedi.
- 92) Enhancement of Undergraduate Engineering Curriculum in Design and Manufacturing Courses Through Implementation of Product Realization; Funding Agency: Louisiana Board of Regents; Period: 06/01/2003 – 06/30/2006; Amount \$69,300. Role: Co-PI; PI: S. Dwivedi.

- 93) *3rd Generation Omni-Directional Treadmill Immersive Simulator*; Funding Agency: US Army Research Office; Period: 02/01/2007 12/31/2011; Amount \$3,084,999. Role: Co-PI. PI: Carolina-Cruz-Neira.
- 94) Development of Knowledge-base Engineering Modules for Injection Molded Parts; Funding Agency: Board of Regents Support Fund – Industrial Ties Research Subprogram; Amount \$152,515 for 3 years (2000-2003). Role: Co-PI. PIs: Dr. Surendra Dwivedi, Terrence Chambers, Rasiah Loganantharaj and Ramesh Kolluru.
- 95) *Enhancement of Scientific Visualization Capabilities in Manufacturing;* Funding Agency: University of Southwestern Louisiana; Amount: \$22,000 (1998-1999). Role: PI/PD. PIs: Ramesh Kolluru, Kimon Valavanis, Al Steward, Stanford Smith, and Theodore Kozman.
- 96) Acquisition of Equipment to Establish a Testbed for the Autonomous Underwater Vehicle; Funding Agency: University of Southwestern Louisiana; Amount: \$47,500 (1997-1998). Role: Co-PI. PIs: Kimon Valavanis, Ramesh Kolluru, and Denis Gracanin.
- 97) *Flat Plate Robotic Gripper*; Funding Agency: Department of Commerce; Amount: \$134,020 (1993-94). Role: Co-PI. PIs: Stanford Smith, Al Steward, Kimon Valavanis, and Ramesh Kolluru.

6. TEACHING & MENTORSHIP

- <u>Classroom Instruction</u>: Serve as a tenured Professor within the School of Computing and Informatics, with application for promotion to Full Professor under review. Taught undergraduate and graduate courses (classroom instruction, research courses, theses, dissertations, independent studies) within the Department of Computer Science (CMPS) and the Center for Advanced Computer Studies (CACS) since 1998 with very positive student evaluation ratings. Continued involvement in classroom instruction until being called upon to serve as the Assistant to Vice President for Research. Courses taught, and where available, the number of students enrolled and student rating (*response to UL Lafayette Student Evaluation of Instruction Summer Report Question 12¹; scale of 1-5, with 1 being the best*) include:
 - Computer Architecture, <u>CMPS 430</u> Undergraduate. Classroom course taught in SP 2002 (33 students; Student Rating: 1.9), FA 2002 (23 students; Student Rating: 1.26), SP 2003 (22 students; Student Rating: 1.39), FA 2003 (15 students; Student Rating: 1.25), SP 2004 (21 students; Student Rating: 1.27), FA 2004 (9 students; Student Rating: 1.3), SP 2005(9 students; Student Rating: 2.44), SP 2006 (7 students; Student Rating: 2.14); Total 8 semesters and 139 students.

¹ Question 12: Compared to Other Instructors I have had, I rate this instructor 1-Top 10%; 2-Top 30%, 3-Average; 4-Lowest 30%; 5-Lowest 10%). A number greater than and as close to 1 as possible reflects the highest level of student rating in comparison to other instructors within the department and the university.

- Special Projects, <u>CMPS 497</u> Undergraduate Capstone Project. FA 2002 (2 students), SP 2003 (2 students), SU 2003 (1 student), FA 2003 (1 student); Total 4 semesters and 6 students.
- Design and Analysis of Algorithms, <u>CMPS 500</u> Graduate. Classroom course taught in FA 2000, SP 2001; Total 2 semesters; student enrollment information not available.
- Special Projects, <u>CMPS 590</u> Graduate Research/Master's Project. Offered in SP 2000 (3 students), FA 2000 (7 students; Student Rating: 1.2), SP 2001 (7 students), FA 2001 (2 students), SP 2002 (4 students; Student Rating: 1.25), FA 2002 (15 students), SP 2003 (12 students; Student Rating: 1.83), FA 2003 (15 students; Student Rating: 1.76), SP 2004 (17 students; Student Rating: 1.25), FA 2006 (5 students; Student Rating: 1.2); Total 10 semesters and 87 students.
- Thesis Research and Thesis, <u>CMPS 599</u>. Offered in SP 2001 (1 student), FA 2001 (1 student), FA 2002 (1 student), SP 2003 (1 student), FA 2003 (2 students); Total 5 semesters and 6 students.
- Advanced Topics in Computer Science, <u>CMPS 619</u>, Graduate Research Class. Offered in SP 2000 (9 students; Student Rating: 1.4).
- Advanced Topics in Computer Software Systems, <u>CMPS 659</u> Graduate Research Independent Study Class. Offered in SP 2001 (20 students; Student Rating: 1.41).
- Advanced Topics in Computer Information Systems, <u>CMPS 669</u> Graduate Research Class. Offered in FA 2000 (17 students; Student Rating: 1.9), FA 2001 (15 students; Student Rating: 1.0), SP 2002 (2 students; Student Rating: 1.0), SU 2002 (7 students; Student Rating: 1.42), FA 2002 (15 students), SP 2003 (13 students; Student Rating: 1.22), SU 2003 (1 student), FA 2003 (6 students; Student Rating: 1.80), SP 2004 (17 students; Student Rating: 1.25), FA 2006 (2 students; Student Rating: 1.0); Total 11 semesters and 95 students.
- Dissertation Research, <u>CMPS 699</u>. Offered in SP 2004 (1 student).
- Select student evaluations, including comments on <u>www.RateMyProfessors.com</u> are as follows:
 - "Dr. Ramesh is an excellent teacher. I hope he can teach more than one class in the following semester. He is always well prepared for the class and have (sic) a strong knowledge in current industry." CMPS 430, Spring 2002.
 - "Dr. Kolluru earns an A+ in my book. He is always prepared; his tests are fair. He constants (sic) asks questions to make sure that students are on track." CMPS 430, Spring 2002.
 - "Great communication skills, and sincere. Wanted us to learn and understand the material." CMPS 430, Fall 2003.
 - "Dr. Kolluru is a great teacher. He uses a unique approach that he puts himself on our level to better help his students. He will bend over backwards to help even a single student." CMPS 430, Spring 2003.
 - *"Great course. Diversification achieved",* CMPS 590, Spring 2004.

- "Dr. Ramesh helped me learn some of the professional standards needed apart from technical ones. Thanks Dr. Ramesh" CMPS 669, Spring 2004.
- *"Class was very organized, notes were online, and Dr. Kolluru did his best to make sure everyone understood."* Online.
- "Dr. Kolluru showed more interest and passion in what he taught than any teacher I have had yet. His jokes keep your attention while covering somewhat dull material." Online.
- "Very energetic, though his duties at the center can occasionally take that out of him when he lacks sleep. A very straight shooter in class, will joke and do his best to keep a grasp on your attention." Online.
- *"This instructor needs more money."* CMPS 430, Spring 2003.
- <u>Graduates Solving Real-world Problems</u>: Incorporated students enrolled in CMPS 497, 590, CMPS 619, CMPS 659, and CMPS 669 courses into externally funded "real-world" R&D projects, with opportunities to interact with clients. Understanding the requirements of the clients and evaluating the applicability of appropriate technologies to address those requirements positioned these students at a great advantage for careers in the private sector.
- <u>Experiential Learning for Undergraduates</u>: Facilitated hands-on learning opportunities as part of undergraduate classes such as Computer Architecture. Working in concert with CMPS faculty to place undergraduate students on internships within the private sector as part of their CMPS 497 and CMPS 498 special projects courses.
- <u>New Courses</u>: As part of Special Topics in Computer Science, introduced and taught graduate level students new curriculum in such emerging topics as enterprise architectures, Java, .NET, CORBA, XML, J2EE, EJB, Object-oriented databases, Intelligent Machines; Robotics and Machine Vision, to prepare students for market needs and industry trends in technology.
- <u>Advising Master's Projects, Theses and Dissertations</u>: Advised and mentored graduate and undergraduate students from Computer Science, Computer Engineering, and Mechanical Engineering.
 - Co-supervised the dissertation of two Ph.D. students Timothy Hebert and Nicholas Ruiz (Departmental policy required that as a CACS graduate, I team up with another faculty member in order to supervise doctoral students).
 - Advised over 100 Master's research projects.
- <u>Supporting Undergraduate and Graduate Students</u>: Through my externally generated research funds, provided financial support (graduate research assistantships, and undergraduate student scholarships/stipends) for more than <u>172</u> graduate and undergraduate students from Computer Science, Computer Engineering, College of Business Administration, Communications, Electrical Engineering, and Mechanical Engineering.

• <u>Advancing STEM Education</u>: Established the "Louisiana TIES Laddered Mentoring *Program*" with funding from the National Science Foundation. The program established connections between students from high schools, with graduate and undergraduate students from the university, CBIT staff and industry partners. The mentoring program provided students (high school, undergraduate and graduate) with a first-hand understanding of the applicability of Science, Technology, Engineering and Mathematics (STEM) education for success in business and entrepreneurship, while deepening the university's partnership with the community and private sector partners. As part of this outreach, made a concerted effort to include faculty and students from minority groups, who continue to be underrepresented in STEM disciplines and the knowledge workforce.

7. PEER-REVIEWED PUBLICATIONS (HIGHLIGHT INDICATES INVITED PAPER)

- Gottumukkala, R., Zachary, J., Kearfott, B. & Kolluru, R. "Real-Time Information Driven Decision Support System for Evacuation Planning", 2012 IEEE International Multi-Disciplinary Conference on Cognitive Methods in Situation Awareness and Decision Support, March 6-8 2012, New Orleans, LA, USA.
- 2) Zhang, H., Gottumukkala, R., Kearfott, B., & Kolluru, R. "A Multi-Objective Mixed Optimization Model for POD to Distribute Emergency Supplies", Institute for Operations Research and the Management Sciences (INFORMS) 2010 Conference, November 2010.
- 3) Gottumukkala, R., **Kolluru**, **R**., Sun, X., Smith, M., Grambling, B., & Zhang, H. "Fuel Demand Estimation for Regional Hurricane Evacuation", National Evacuation Conference, Feb 3-5, 2010, New Orleans, LA.
- 4) Katz, D.S., Allen, G., Cortez, R., Cruz-Neira, C., Gottumukkala, R., Greenwood, Z.D., Guice, L., Jha, S., Kolluru, R., Kosar, T., Leger, L., Liu, H., McMahon, C., Nabrzyski, J., Rodriguez-Milla, B., Siedel, E., Speyrer, G., Stubblefield, M., Voss, B., & Whittenburg, S. "Louisiana: A Model for Advancing Regional e-Science through Cyberinfrastructure", Philosophical Transactions of the Royal Society of London, Series A, (2009) 367, 2459–2469, doi:10.1098/rsta.2009.0037.
- 5) Stewart, G., **Kolluru**, **R**. & Smith, M. "Leveraging Public-Private Partnerships to Improve Community Resilience in Times of Disaster," International Journal of Physical Distribution and Logistics Management, ISSN 0960-0035, Vol. 39, No. 5, 2009, Emerald Publishing.
- 6) **Kolluru**, **R.**, Meredith, P., Steward, A., Smith, M., Smith, S., Peck, J., Davis, S., & Dwivedi S.N., "*An Extended Enterprise Framework for Supply Network Management*", International Journal of Agile Manufacturing, May 2004 Vol. 3, Issue 2.
- 7) **Kolluru**, **R**., & Meredith, P.H. "Security and Trust Management in Supply Chains", Journal of Information Management and Computer Security, May 2001, MCB University Press, U.K.

- 8) **Kolluru, R**., Meredith, P., Steward, A., Smith, & Smith, M. "*2-Stage Forecasting Model for Supply Networks Using Artificial Neural Networks*", International Journal of Supply Chain Management, April 2001, MCB University Press, Bradford, England.
- 9) Peck, J., **Kolluru, R**, Davis, S., Meredith, P., Kernodle B., Smith, S., Jarvis, C., Steward, A., & Pargas, R., "*Information Support for Supply Network Management*", International Journal of Agile Manufacturing, May 2001, Vol. 3 No. 2.
- 10) Peck, J., **Kolluru, R.**, Davis, S., Meredith, P., Jarvis, C., Smith, S., & Kernodle, B., "*Scalable information flow for the extended business enterprise*", International Journal of Clothing Science and Technology, April 2001, Vol. 12 No. 6, 102-103.
- 11) **Kolluru**, **R**., Valavanis, K., Smith, S., & Tsourveloudis, N. "*An overview of the University of Louisiana Robotic Gripper System Project*" (invited paper), Transactions of the Institute of Measurement and Control, Arnold Publishers, UK.
- 12) **Kolluru, R**., Loganantharaj, R. & Smith, S. "*Design and Development of Autonomous Intelligence Smart Sensors*", in *Intelligent Problem Solving*, Springer-Verlag, 2000. Eds. Moons Ali, Günter Palm, and Rasiah Loganantharaj.
- 13) **Kolluru, R**., Valavanis, K., Smith, S., & Tsourveloudis, N. *"Design Fundamentals of a Reconfigurable Robotic Gripper System"*, IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, Volume 30, Number 2, pp. 181-186, March 2000.
- 14) Hebert, T., Tsourveloudis, N., Valavanis, K., & **Kolluru**, *R. "Mobile Robot Navigation in 2-D Dynamic Environments Using an Electrostatic Potential Field"* IEEE Transactions on Systems, Man and Cybernetics, Part A, Volume 30, Number 2, pp. 187-196, March 2000.
- 15) Tsourveloudis, N., Valavanis, K. & Kolluru, R. "Position and Suction Control of a Reconfigurable Robotic Gripper," Machine Intelligence and Robotic Control, Vol. 1, No. 2, pp.: 53-62, December 1999.
- 16) Tsourveloudis, N., **Kolluru, R**., Valavanis, K. & Gracanin, D. *"Suction Control of a Robotic Gripper: A Neuro-Fuzzy Approach"*, Journal of Intelligent and Robotic Systems, 00: 1-21, 1999.
- 17) **Kolluru**, **R**., & Valavanis, K. *"Modeling, Analysis and Performance Evaluation of a Robotic Gripper for Limp Material Handling",* IEEE Transactions on Systems, Man and Cybernetics, Volume 28B, Number 3, June 1998.
- 18) Hebert, T., **Kolluru, R**., & Valavanis, K. *"A Real-time, Hierarchical, Sensor-based Robotic System Architecture",* Journal of Intelligent & Robotic Systems, Vol. 21, No. 1, pp.: 1-27, January 1998.
- 19) Valavanis, K., Gracanin, D., Matijasevic, M., **Kolluru, R**., & Demetriou, G. *"Control Architectures for Autonomous Underwater Vehicles"*, Invited Paper, IEEE Control Systems Magazine, Vol. 17, No. 6, December 1997.

- 20) **Kolluru, R**., Valavanis, K., Steward, G., & Sonnier, R. "A Flat Surface Robotic Gripper for Handling Limp Material", IEEE Robotics and Automation Magazine, Vol. 2, No. 3, pp.: 19-26, September 1995.
- 21) **Kolluru, R**., Meredith, P., Steward, A., Smith, M., Smith, S., Peck, J., Davis, S., & Dwivedi S.N., *"Concurrent Engineering in Supply Chains"*, Invited Paper, 8th ISPE International Conference on Concurrent Engineering: Research and Applications, Los Angeles, California, July 28 August 1, 2001.
- 22) Peck, J., **Kolluru, R.,** Davis, S., Meredith, P., Pargas, R., Kernodle B., Smith, S., Jarvis, C., & Steward, A., "*Information Support for Supply Network Management*", *Proceedings of the Scalable Enterprise Systems Workshop*, Sponsored by NSF Design, Manufacturing and Industrial Innovation, May 19, 2001, Dallas, TX.
- Kolluru, R., Peck, J., Davis, S., Meredith, P., Pargas, R., Kernodle B., Smith, S., Jarvis, C., & Steward, A., "Scalable Information Architecture for the Extended Enterprise", Proceedings of the Scalable Enterprise Systems Workshop, Sponsored by NSF Design, Manufacturing and Industrial Innovation, Jan 7, 2001, Miami, Florida.
- 24) Kolluru, R., Loganantharaj, R., Smith, S., Bayyapu, P., LaBauve, G., Spencer, J., Hooker, J., Simmons, S. & Hebert, T. "Design and Development of Autonomous Intelligence Smart Sensors", Proceedings of the 13th Intl. Conference on Industrial and Engineering Applications of Artificial Intelligence and Expert Systems, New Orleans, Louisiana, pp. 306-315, June 19-22, 2000.
- 25) **Kolluru, R**., Meredith, P., & Smith, S. "*Intelligent Control Architecture for Manufacturing Enterprise Integration*", International Association of Science and Technology for Development International Conference on Control and Applications, May 24-27, 2000, Cancun, Mexico.
- Kolluru, R., Smith, S., Meredith, P., Loganantharaj, R., Chambers, T., Seetharaman, G., & D' Souza, T. *"A Framework for the Development of Agile Manufacturing Enterprises"*, IEEE International Conference on Robotics and Automation San Francisco, CA, April 24-28, 2000.
- 27) **Kolluru, R.**, Valavanis, K., Smith, S., & Tsourveloudis, N. "*Design and Analysis of a Reconfigurable Robotic Gripper for Limp Material Handling*" IEEE International Conference on Robotics and Automation (ICRA 2000), San Francisco, CA, April 24-28, 2000.
- 28) **Kolluru, R**., Smith, S., Loganantharaj, R., Chambers, T., Gracanin, D., & Seetharaman, G. *"An Information Framework for Integrated Agile Manufacturing Systems"*, Invited Paper, Proceedings of the Joint Meeting of the 3rd World Multiconference on Systemics, Cybernetics and Informatics (SCI '99) and the 5th International Conference on Information Systems Analysis and Synthesis (ISAS '99), Orlando, USA, July 31 - August 4, 1999.
- 29) **Kolluru, R**., Valavanis, K., Smith, S., & Tsourveloudis, N. "*Design Fundamentals of a Reconfigurable Robotic Gripper*", Proceedings of 18th IASTED International Conference on Modelling, Identification and Control, Innsbruck, Austria, February 1999.

- 30) Loganantharaj, R. & **Kolluru, R.** "*An Efficient Scheduling Algorithm for an Automated Storage and Retrieval System*", 12th International Conference on Computer Applications in Industry and Engineering, November 4-6, 1999 Atlanta, GA.
- 31) Tsourveloudis, N., **Kolluru, R**., & Valavanis, K. *"Fuzzy Control of a Suction-Based Robotic Gripper System"*, Proceedings of the IEEE Conference on Control Applications, CCA '98, September 1998, Trieste, Italy.
- 32) **Kolluru, R**., & Valavanis, K. *"Design and Analysis of a Reconfigurable Robotic Gripper System",* Invited Paper, Proceedings of the International Symposium on Intelligent Robotic Systems, Bangalore, India, January 10-12, 1998.
- 33) **Kolluru, R**., Hebert, T., & Valavanis, K. "*A Robotic Gripper System for Limp Material Manipulation: Modeling, Analysis and Performance Evaluation*", Proceedings of the IEEE International Conference on Robotics and Automation, ICRA'97, pp.: 310-316.
- 34) Hebert, T., Valavanis, K. & **Kolluru, R**. "A Robotic Gripper System for Limp Material Manipulation: Hardware and Software Development and Integration", Proceedings of the IEEE International Conference on Robotics and Automation, ICRA'97, pp.: 10-16.
- 35) **Kolluru, R.** & Valavanis, K. *"Robotics and Automation in the Apparel and Textiles Industry: The Current Situation"*, Presentation at the Workshop on Service Robots, The Eighth International Conference on Advanced Robotics, ICAR 1997, Monterey, CA, July 6-9, 1997.
- 36) Gracanin, D., Valavanis, K., Matijasevic, M. & **Kolluru, R.** "*Development of a Virtual Reality Testbed and AUV Control Architecture for Coastal/Shallow Water Environments*", Published in Proceedings of Coastal Ocean Space Utilization, 1997.
- 37) **Kolluru, R.**, & Valavanis, K. "*Design of a Robotic Gripper System for Automated Deformable Material Manipulation*", Proceedings of the World Automation Congress: International Symposium on Robotics and Manufacturing, France, May 1996.
- 38) **Kolluru, R**., Valavanis, K., Steward, A., & Sonnier, M. "*A Sensor-based Robotic Gripper for Limp Material Handling*", Proceedings of the Third IEEE Mediterranean Symposium on Control and Automation, Vol. 1., pp.: 68-76, Cyprus, June 1995.

8. TECHNOLOGY TRANSFER AND COMMERCIALIZATION

- 1) *AMIGO* (Licensed to Premiere Performance Systems/Fusion Technologies): Geophysical processing software suite to enable 4D processing and visualization of seismic datasets to support exploration and production operations in support of the oil and gas industry.
- 2) *TX-5-926-163: CAPTURE* (Licensed to ADMIN.701/Decyphor Processing Systems); Registered: March 23, 2004; Author(s): University of Louisiana at Lafayette (employer for hire of Ramesh Kolluru, et al.)
- 3) *TX-5-853-415: Student Information System*; Registered: December 10, 2003; Author(s): UL Lafayette (employer for hire of Ramesh Kolluru, et al.)

- 4) *TX-5-866-204: A Supply Chain Game for the Computer Industry*; Registered: December 10, 2003; Author(s): UL Lafayette (employer for hire of Mark Smith, Ramesh Kolluru, et al.)
- 5) *TX-5-866-24: Web-based Electronic Research Administration (WebERA)*; Registered: December 10, 2003; Author(s): UL Lafayette (employer for hire of Ramesh Kolluru, et al.)
- 6) *TXu-1-151-721: LoadEval*; Registered: September 3, 2002; Author(s): UL Lafayette (employer for hire of Ramesh Kolluru, et al.)
- 7) *TXu-1-053-382: Supply Chain Integrated Markup Language*; Registered: June 3, 2002; Author(s): UL Lafayette (employer for hire of Ramesh Kolluru, et al.)
- 8) *TXu-1-029-910: Louisiana Commerce Exchange System* (Licensed to Louisiana Department of Economic Development); Registered: April 18, 2002; Author(s): UL Lafayette (employer for hire of Ramesh Kolluru, et al.)
- 9) *TXu-1-029-911: A Client Management System for Procurement Technical Assistance Centers*; Registered: April 18, 2002; Author(s): UL Lafayette (employer for hire of Ramesh Kolluru, et al.)
- 10) *TXu-1-011-398: Petroleum Industry Exchange Systems (PIEs) of Acadiana*; Registered: October 1, 2001; Author(s): UL Lafayette (employer for hire of Ramesh Kolluru, et al.)
- 11) *TXu-1-020-609: Defense Apparel Manufacturers Electronic Reporting System*; Registered: September 25, 2001; Author(s): UL Lafayette (employer for hire of Ramesh Kolluru, et al.)
- 12) *TXu-1-020-599: Bill & Hold Contract Management System (B&HCOMS);* Registered: September 24, 2001; Author(s): UL Lafayette (employer for hire of Ramesh Kolluru, et al.)
- 13) *TXu-1-020-598: Experts Online* (Licensed to Louisiana Department of Economic Development); Registered: September 21, 2001; Author(s): UL Lafayette (employer for hire of Ramesh Kolluru, et al.)

9. INVITED PRESENTATIONS & PROFESSIONAL ACTIVITIES

Invited speaker at over 100 national conferences, panels, and workshops including such events as The White House, US Ignite, Health Data Palooza, National Hurricane Conference, Supercomputing, Governor's Economic Development Conference, Louisiana Industrial Development Executives Association, Louisiana Entrepreneurship Panel (2003), among several others. Select list includes:

- 1) Invited Speaker and Session Chair, *International Conference on the Dramatic Changes of the Planet and the Hellenic Roots of Ecological Ethics*, Patras, Greece, June 16-20, 2018.
- 2) Invited Luncheon Speaker, REALTORS® Commercial Alliance, Lafayette, Louisiana, June 6, 2018.

- 3) Invited Keynote Speaker, "*Perspectives on Entrepreneurship*," U.S. Association for Small Business and Entrepreneurship (USASBE) Chapter, Lafayette, Louisiana, April 27, 2018.
- 4) Session Chair, "*Opioid Summit and Hackathon*," CajunCodeFest 6.0, Lafayette, Louisiana, April 13, 2018.
- 5) Invited Speaker, *"Intro Lafayette: Innovation and Research,"* Leadership Institute of Acadiana, Lafayette, Louisiana, March 1, 2018.
- 6) Invited Speaker and Panelist, *"Essential Players in Making Technology Work,"* 2017 Louisiana Smart Growth Summit, Center for Planning Excellence, Baton Rouge, Louisiana, November 8, 2017.
- 7) Invited Speaker and Distinguished Guest, *"Foro Internacional, Uniendo Fronteras Hacia El Desarrollo Sustenable / International Forum, Bridging Borders Towards Sustainable Development,"* Centla, Tabasco, Mexico, June 5-6, 2016.
- 8) Invited Speaker, <u>The White House, "*President Obama's launch of the US Ignite Initiative*", Office of Science and Technology Policy and the National Science Foundation, The White House, January 27, 2016.</u>
- 9) Invited Speaker and Local Chair, <u>5th FEMA Conference on Public-Public Partnerships"</u>, New Orleans, Louisiana, December 9-10, 2015.
- 10) Invited Speaker, 2013 HIMSS Gulf Coast Chapters Conference, December 5-6, Beau Rivage Resort, Biloxi, Mississippi.
- 11) Invited Main Stage Speaker, 2013 Health Data Palooza, Omni Shoreham Hotel, Washington, D.C., June 2-4, 2013.
- 12) Invited Speaker, <u>The White House, "President Obama's launch of the US Ignite</u> <u>Initiative</u>", Office of Science and Technology Policy and the National Science Foundation, The White House, June 14, 2012.
- 13) Invited Speaker and Distinguished Guest, "<u>CBIT, Louisiana Day at Microsoft</u>", Executive Briefing Center, Microsoft Corporation, Redmond, Washington, December 6, 2011.
- 14) Invited Testimony, Senate Homeland Security and Governmental Affairs Committee, *"Port Fourchon and LA-1 Consequence Analysis"*, US Congress, Senate Dirksen Building, November 19, 2011.
- 15) Invited Speaker and Session Co-Chair, "1st International Workshop on Regional Critical infrastructures Protection Programmes: Main issues, Experiences and Challenges," Lombardy Region Authorities in Milan, Italy, November 17-18, 2011.
- 16) Invited Speaker and Session Co-Chair, "*The First National Conference on Building Resilience Through Public-Private Partnerships*", Federal Emergency Management Agency, Washington, D.C., August 3 4, 2011.
- 17) Invited Presenter, "*Strategic Public-Private Sector Initiatives in Louisiana*", National Emergency Managers Association (NEMA) 2010 Annual Conference, October 17-21, 2010.

- 18) Invited Presenter, "*Strategic Public-Private Sector Initiatives in Louisiana*", Governor's Hurricane Conference, May 23, 2010.
- 19) Invited Presenter, "*Critical Infrastructure Dependencies*", Southern States Homeland Security Conference, New Orleans, Louisiana, April 2010.
- 20) Invited Presenter, "Louisiana Business Emergency Operations Center: A Strategic Public-Private Partnership Initiative in Louisiana", Louisiana's 18 CIKR Representatives, March 2010.
- 21) Invited Presenter, "Louisiana Business Emergency Operations Center: *Strategic A Public-Private Partnership Initiative in Louisiana*", National Hurricane Conference, March 2010.
- 22) <u>Ramesh Kolluru</u>, "Proactive Business Coordination During Gustav and Ike", in Controlling Our Own Destiny: Proactive Steps for Resilient Communities, US Chamber of Commerce, Business Civic Leadership Center Report 2009, pages 44-45.
- 23) <u>Ramesh Kolluru</u> and Mark Smith, "*Public-Private Partnerships as Drivers for Disaster Supply Chain Resiliency*," Invited Paper, US DHS Workshop on Emergency Management: Incident, Resource, and Supply Chain Management, November 5-6, 2009, Center for Emergency Response Technologies, UC Irvine. Presented at the Workshop by Dr. Mark Smith.
- 24) Panelist, "*Government Perspective on Emergency Management*", U.S. Department of Homeland Security (DHS) Science & Technology Directorate Workshop on Emergency Management: Incident, Resource, and Supply Chain Management (EMWS09), November 5-6, 2009, UC Irvine.
- 25) Keynote Speaker, "*Prepare Your Business for Hurricanes: The Critical Need for Public-Private Partnerships in Enhancing National Security*", Central Louisiana Chamber of Commerce Strategic Luncheon, Alexandria, Louisiana, May 13, 2009.
- 26) Keynote Speaker, "*Public-Private Partnerships in Disaster Management*", Louisiana Emergency Preparedness Association (LEPA)/Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) Annual Workshop, May 4-7, 2009, Lake Charles, LA.
- 27) Invited Presenter, "*Public-Private Partnerships in Disaster Management*", All Hazards Preparedness Conference/Gulf States Hurricane Conference, April 27-May 1, 2009, Biloxi, MS.
- 28) Invited Presenter, "*Supply Chain Management during Disasters*", Grand Challenge in Coastal Resiliency I: Transforming Coastal Inundation Modeling to Public Security, Louisiana State University, Baton Rouge, January 21, 2009.
- 29) Expert Panelist, "*Lessons Learned from Hurricanes Katrina through Ike*", US Chamber of Commerce, BCLC Forum on Next Steps for Improving Local, State and National Disaster Recovery Strategies, January 14, 2009, Office Depot Headquarters, Boca Raton, FL.
- 30) Keynote Speaker, "Cyberinfrastructure for Emergency Management", SGI Academic

Panel, Supercomputing 2006 on Application of Supercomputing and Visualization to Louisiana's Post-Katrina Recovery and Restoration, November 13, 2006, Tampa, Florida.

- 31) Invited Speaker, "*Supply Chain Management within Defense Logistics Agency*", at the Annual U.S. Procurement and Technical Assistance Center (PTAC) Conference, April 13, 2004, Nashville, TN.
- 32) Speaker, "*Governor's Conference on Economic Development*", New Orleans, LA, April 19, 2004.
- 33) Member, Program Committee, "U.S. Department of Homeland Security (DHS) Science & Technology Directorate Workshop on Emergency Management: Incident, Resource, and Supply Chain Management", November 5-6, 2009, University of California, Irvine.
- 34) Reviewer, National Science Foundation Partnerships for Innovation Program (2008).
- 35) Member, Southeastern Universities Research Association (SURA) IT Committee (2008.)
- 36) Co-Chair, Workforce Development Committee, Greater Lafayette Chamber of Commerce (2007.)
- 37) Co-Chair, Innovation Committee, Greater Lafayette Chamber of Commerce (2007.)
- 38) Chair, Workshop on Photochemical Systems for the Chemical Industry UL Lafayette and Louisiana Department of Natural Resources, June 22, 2001.
- 39) Co-Chair, 8th ISPE International Conference on Concurrent Engineering: Research and Applications, Los Angeles, California, July 28 August 1, 2001.
- 40) Guest Editor, International Journal of Agile Manufacturing, Special Issue on *"Technologies enabling Supply Chain Management"* (2001.)
- 41) Co-Chair, IEA/AIE-2000 13th International Conference on Industrial & Engineering Applications of Artificial Intelligence & Expert Systems, June 19-22, 2000, New Orleans.
- 42) Co-Chair, SCI 1999/ ISAS 1999, Orlando, USA, July 31 August 4, 1999.
- 43) Associate Editor, International Journal of Agile Manufacturing (1999.)
- 44) Chair, "*Workshop on Advances in Service Robots*", July 6, 1997 at the Eighth International Conference on Advanced Robotics, ICAR 1997, Hyatt Regency, Monterey, CA. (with Dr. Paolo Fiorini, Jet Propulsion Laboratories, NASA.)
- 45) Associate Editor, "Proceedings of the International Advanced Robotics Programme IARP, 1998."
- 46) Reviewer, Kluwer Academic Publishers, IEEE Robotics and Automation Society, IEEE Conference on Decision and Control, IEEE Conference on Systems, Man and Cybernetics, Journal of Intelligent and Robotic Systems, IEEE Conference on Robotics and Automation.