

Singapore Management University and Carnegie Mellon University to Create the Living Analytics Research Centre

1563 words 7 March 2011 Singapore Government News

Singapore, March 7 -- Singapore Management University issued the following news release: Singapore Management University (SMU) and Carnegie Mellon University (CMU) in Pittsburgh Pennsylvania, USA, have teamed up to establish the Living Analytics Research Centre (LARC). The Centre will develop new techniques to acquire data on consumer and social behavior and pioneer new approaches to analyse such data to develop applications and methods that will benefit consumers, businesses and society.

The collaboration has received a S\$26 million grant over five years from the National Research Foundation in Singapore. This fund is managed through the multi-agency Interactive Digital Media Programme Office (IDMPO) hosted by Media Development Authority of Singapore. With SMU and CMU committed to cash and in-kind contributions, and third party funding, the S\$60 million centre will establish Singapore as one of the world's pre-eminent centres of excellence in computational social science.

The Living Analytics research programme is distinctive in that it combines the key technologies of Big Data (large scale data mining, statistical machine learning, and computational tools for the analysis of dynamic social networks) with analytics focused on consumer behavior and social media.

"We are honoured to have this extraordinary LARC opportunity that takes our existing relationship with CMU to a new level of research intensity," said SMU President Professor Arnoud De Meyer. "The SMU - CMU collaboration gives us a global edge in interdisciplinary research that integrates computation, management, and social science.

The LARC is a giant step forward in SMU's drive to becoming a global leader in research and education at the intersection of business, behavioural and social analytics. Also, this partnership takes advantage of SMU's unusual composition of having a powerful School of Information Systems in the midst of what is otherwise a management and social science oriented university."

"The Living Analytics Research Centre builds on CMU's successful collaborations with SMU over the years," said CMU President Dr Jared L. Cohon. "We are pleased to be partnering with SMU on such an exciting initiative, one that has great potential for groundbreaking work in the emerging field of computational social science."

The pervasive use of social and digital media, personal digital devices and smart infrastructure has created rapidly expanding streams of data that provide more complete information about people's behaviors as they live, consume and interact. This data can be used to eventually develop new types of practical applications for individual consumers, business service providers and public sector service providers across a range of lifestyle, consumer and industry settings.



The LARC will also study the complex trade-offs between privacy protection and the benefits of sharing one's information with a broader social network. This will be done in a variety of ways, including technology for privacy protection, as well as economic and behavioral approaches to explore how people prefer to make these trade-offs.

The centre will advance the large-scale analysis of lifestyle behavior data with its emphasis on near real-time analysis of streams of information that are continuously evolving. LARC can do this quickly at societal scale, combining information from individuals and from the surrounding network context, across multiple sources of information, and over extended periods of time. To accomplish this, the centre will develop new models to explain and predict social and consumer behavior in networked contexts.

The centre will draw on the cross-disciplinary strengths of SMU and CMU faculty and span the two universities. It will be physically anchored at SMU's School of Information Systems in Singapore and at CMU's Heinz College iLab in Pittsburgh Pennsylvania, USA. SMU will host the test beds, serve as the anchor node of the eco-system of partner organizations that will engage with the LARC and be the focal point of research engagement by teams co-led by SMU and CMU faculty.

In Singapore, the project will involve School of Information Systems faculty as well as faculty from SMU's five other Schools - Business, Economics, Social Sciences, Law and Accountancy. The LARC will also work closely with several of SMU's existing university-wide research Institutes, especially the Institute for Service Excellence at SMU (ISES), the Behavioral Sciences Institute, and the Institute for Innovation and Entrepreneurship. Faculty members from four of CMU's seven academic units will participate, including the H. John Heinz III College, the School of Computer Science, the College of Humanities and Social Sciences and the Tepper School of Business.

"Singapore is the best place in the world to establish the Living Analytics effort because of our intense use of digital and social media, our intelligent infrastructure, our IT savvy population and our spirit of always looking to explore how to use emerging social trends for our societal and economic benefit," said Professor Steven Miller, dean of the SMU School of Information Systems. "The LARC concept and the tools we will develop will be applicable to many of the world's leading urban centres. Business and government innovation leaders from these other cities will want to come to Singapore to learn what we are doing here with Living Analytics."

"CMU has a long history of doing pioneering work at the interface of advanced computational and social and behavioural science," said Professor Ramayya Krishnan, dean of CMU's Heinz College and director of its iLab. "Living Analytics is our next major step in this direction. It enables us to combine our strength in machine learning, statistics, management science and social science - making us the ideal partner for SMU. Together, we are uniquely positioned to become leaders in the field of Living Analytics research. As information technology increasingly enables people to live their lives in social network-centric worlds, we can produce new tools and ways of thinking that will have considerable value for society and business organizations."



Through LARC and this new five-year CMU research partnership, SMU expects to dramatically improve the quality of the applicant pool to its various PhD programmes. Over the next five years, 40 SMU PhD students working on Living Analytics projects, mostly from the School of Information Systems, will be sponsored by LARC to spend an academic year at CMU's Pittsburgh campus, immersed in cutting edge research activity with centre related faculty.

On supporting the LARC, Mr Michael Yap, Executive Director of IDMPO, said: "The research work of LARC will generate new social and lifestyle insights to provide context-relevant information for consumers at the right time. The combined strengths of CMU and SMU put Singapore on the map of this fast-growing area and in time, will provide companies with the edge to better connect and transform businesses."

About the School of Information Systems

The SMU School of Information Systems (SIS) was created in 2003 to extend SMU's research and education efforts into the areas of Information Systems Technology, Information Systems Management, and problems at the intersection of IS technology and management.

SIS is distinct from the other five schools at SMU in that it is the only academic unit within the university classified as under Singapore's Science & Technology cluster of academic units as defined by the Ministry of Education.

The School possesses deep technology-based research and creation capability in four strategically selected areas of information technology, systems and applications: data management & analytics, intelligent systems & decision analytics, software systems, and information security & trust. The fifth strategic area of the school is Information Systems & Management, which investigates a range of issues related to the managerial and business impacts of IT within firms, and across collaboration networks, value chains, markets and industries. www.sis.smu.edu.sg

About Carnegie Mellon University

Carnegie Mellon (www.cmu.edu) is a private, internationally ranked research university with programs in areas ranging from science, technology and business, to public policy, the humanities and the fine arts. More than 11,000 students in the university's seven schools and colleges benefit from a small student-to-faculty ratio and an education characterized by its focus on creating and implementing solutions for real problems, interdisciplinary collaboration and innovation. A global university, Carnegie Mellon's main campus in the United States is in Pittsburgh, Pa. It has campuses in California's Silicon Valley and Qatar, and programs in Asia, Australia, Europe and Mexico. The university is in the midst of a \$1 billion fundraising campaign, titled "Inspire Innovation: The Campaign for Carnegie Mellon University," which aims to build its endowment, support faculty, students and innovative research, and enhance the physical campus with equipment and facility improvements. About the Heinz College



The Heinz College is comprised of the School of Public Policy and Management and the School of Information Systems and Management. The two schools share a unified faculty that brings expertise in multiple areas to bear on the most complex problems facing the world today. The schools offer master's and doctoral degrees in areas ranging from information security and policy, and information systems, to public policy, arts and health care management. The Heinz College delivers academic programs in Pittsburgh, Washington, D.C. and Los Angeles in the United States and in Adelaide, Australia. For more about the Heinz College, visit http://www.heinz.cmu.edu.

Source: Singapore Management University