



## Digital Networking Event Enhances Industry-Academia Connections

Digital Media and Software Development was the theme of the second in a series of industry-academia collaborative workshops sponsored by Louisiana EPSCoR and the Board of Regents. The workshop was held on June 14, 2011 at the Louisiana Immersive Technologies Enterprise (LITE) Center in Lafayette.

The workshop attracted leaders from industry and academia across Louisiana for a full day of networking, break-out group interactions and panel presentations.

The plenary speaker for the workshop was Alex Chatfield, the Director of Operational Development for EA Sports. His presentation provided insight into industry-wide changes and needs that are ripe for further collaborations with academia. The industry has experienced a huge digital shift: the platforms are constantly evolving, the multi-dimensional games push the hardware to the limit, consumption is now 24/7, and users not only interact with the games, they generate their own content. Due to these rapid changes, Chatfield says the gaming industry hires not only programmers, but also a balance of designers and artists.

"From an industry perspective, we are looking for college graduates who are very creative and passionate, but they must also be disciplined, with respect to the constraints of the hardware and the limited time box," said Chatfield. He provided an example of the Apollo 13



*Bobby Savoie, President of Geocent, presenting during the industry panel.*

crisis, where the engineers had to use their creativity to solve a problem while working with extremely tight resources and time constraints.

Panel Presentation I focused on how academia can help prepare students for a successful career in industry. Industry panelists included: Frank Auer (CEO, Praeses), Bobby Savoie (President, Geocent), Ryan Clark (Staff Scientist, ARCADIS), and Scott Eric Olivier (CEO, Skyscraper Data Solutions).

"Like a doctor is required to do clinicals, our industry finds that internship experience is far more valuable in the long run than time in books," said Frank Auer, CEO of Praeses, an international information management service company based in Shreveport. "It is better to cooperate than compete for students. We would prefer to hire Bachelors graduates and then we pay

for graduate school," he continued.

Mr. Olivier touted Louisiana's "incredible connectivity" in both community and digitally, referring to LONI, the state-wide high-speed optical network and the national LambdaRail network.

Panel Presentation II presented stories of successful collaborations, and was led by: Marcus Morton (President, NiFTy-TV), Dr. Mike O'Neal (Chief Scientist, NiFTy-TV), Devin Broome (VP, First Call), Ray McIntyre Jr. (Visual Effects Supervisor, Pixel Magic), and C.E. Richard (Filmmaker and Professor, ULL).

Mr. Richard described a very successful collaboration between the booming digital media and film industry and ULL, where an entirely new baccalaureate program was created, called the Moving Image Arts Program.

Panel Presentation III featured the academic perspective with four panelists: Dr. Carolina Cruz-Niera, ULL; Dr. Brygg Ullmer, LSU; Dr. John Zachary, ULL; and Dr. Joel Tohline, LSU/LONI.

"Real applications of science and technology are growing at exponential rates. The role of universities in science and technology is becoming

"Praeses is represented on industrial advisory boards for computer science at both LSU and LA Tech. We are delighted to have seen curriculum changes at both universities, based upon suggestions made by the respective advisory boards. We know such changes are non-trivial undertakings. The combination of the suggestions made by industry and the fitting responses made by the universities prove effective collaboration. We are excited about the mutual benefits we can expect by growing these relationships."

- Mr. Frank M. Auer, CEO of Praeses

more challenging, so there is a great need to continue to develop large, multidisciplinary teams,” said Dr. Cruz-Niera, holder of the W. Hansen Hall and Mary Officer Hall/BoRSF Endowed Super Chair in Telecommunications in Computer Engineering and the Chief Scientist of LITE at ULL.

“These academic-industry partnerships are a win-win-win situation for Louisiana. Academia wins with stable funding for research, exposure to the real world, and training of students in research. Industry wins with low risk-high value innovations, access to pre-public IPs, access to multiple universities, and improved access to capital. The economy wins with creation of applied innovations and solutions, and knowledge economy workforce solutions,” said Dr. Zachary, Director for Information Systems Research at the ULL Center for Business and Information Technologies.

Dr. Brygg Ullmer, Associate Professor of Computer Science at LSU, suggested that academia and industry would greatly benefit by adding an “A” to the science, technology, engineering, and mathematics (STEM) education pipeline. The “STEAM” pipeline would integrate vocational skills and the arts to help students connect tangible interfaces to digital visualization. Graphic design and vocational courses give valuable tacit experience engaging with materials and dimension - something that you cannot learn in a purely algorithmic setting.



*Academia panelist Dr. Joel E. Tohline (center), Director of LSU’s Center for Computation & Technology, participates in a workshop break-out discussion.*

The Director of LSU’s Center for Computation & Technology, Dr. Joel Tohline, said “to get from theoretical underpinnings to a computer solution requires core interdisciplinary expertise that enables all computer sciences and digital arts research,” said Tohline. The Louisiana academic research community brings this valuable core interdisciplinary expertise and infrastructure to the table and is actively looking to develop further ties with industry. There is a natural overlap with the digital arts and entertainment industry with scientific visualization, grid computing and GPUs.

The workshop closing editorial viewpoint was given by Dr. Thomas Sterling, the Arnaud and Edwards Professor of Computer Science at the LSU Department of Computer Science, Adjunct Professor of the LSU Department of Electrical and Computer Engineering, and System

Science and Engineering Focus Area Head of the Center for Computation and Technology.

Dr. Sterling pointed out that learning is lifelong, and Louisianans need to “learn how to learn and learn how to think.” Education should involve both academia and industry, starting with outreach to K-12 students to provide role models, motivation and inspiration.

Enhancing mid-profession training will serve to supercharge industry, refresh the skill sets and knowledge of those working here, and provide rewarding career progression.

Another vital area ripe for additional industry and academic collaborations and focus is entrepreneurialism, including streamlining tech transfer from lab to market, developing additional business incubators, and finding new sources of start-up funds.