AVATAR—LSU's digital media initiative—comes of age

News

Press Releases Event Announcements CCT Weekly Grants and Funding Student News Archived News Source: Greater Baton Rouge Business Report

It's Tuesday morning at LSU's Louisiana Digital Media Center, situated between the John M. Parker Coliseum—sometimes known as the Cow Palace—and the Louisiana Emerging Technology Center in the southeast corner of campus. Seven students in the digital media arts and engineering master's program are in a glass-walled second-floor classroom, where each of them have two computer monitors.

O'mar Finley, Brandon Bailey and Trill Noel are presenting their group project: a website for an imaginary health club. Technically, the site seems fine, but it lacks a consistent look.

"I can certainly see that it looks like three people made it, just based on color choices," says their teacher, Marc Aubanel, who directs the DMAE program. "At some point, rather than hashing it out," he added a few minutes later, "I think you kind of agreed to disagree, and went off into your corners and did your own thing."

The team concedes that they probably should have spent more time planning. "I think we were itching to start coding," Finley says. "I guess the fear of not being able to finish kind of washed over us, so we just kind of jumped in as soon as possible."

But flaws aside, the team takes pride in its finished product. During a class break after the presentation, Noel says he had to learn three programming languages to complete his portion of the project.

"We conquered the unknown," Bailey added.

LSU began developing its AVATAR [Arts, Visualization, Advanced Technologies and Research] initiative in about 2006. It started with an effort to recruit more faculty in various disciplines to offer more digital media-focused courses and programs, explains Robert Kooima, an assistant professor in the School of Electrical Engineering and Computer Science.

In 2008 AVATAR was credited with helping Electronic Arts choose LSU as the future home of its first U.S.-based video game testing facility. Construction began on the 94,000-square-foot Digital Media Center, which houses the Center for Computation & Technology and EA, in 2011, and the building was officially dedicated last year.

FROM ARTS TO ENGINEERING

Seven campus units participate in the AVATAR initiative, including the schools of art and music; the departments of computer science, electrical and computer engineering, English, and mass communication; and the CCT. LSU's digital media minor grew out of AVATAR.

"A computer science student might take a screenwriting class in English," Kooima says. "So there's a lot of cross-pollination between departments."

That convergence reflects the needs of the digital media industry, where companies want workers who can collaborate with people who have different specialties, Aubanel says.

"When we would do any outreach with professionals about what they want from students, 50 percent of the discussion was about hard skills, and 50 percent of the discussion was about soft skills," he says. "Understanding the language of artists if you're a programmer, or programmers if you're an artist, so that you can work more effectively together."

The minor was established in 2010, and the first graduates of the program finished in 2012. About 200 students have completed the minor so far.

There were plans to add a master's degree from the beginning, but faculty knew the undergrad program had to be built first, Kooima says. In about 2010 or 2011, CCT was told to establish the master's program.

"All of this stuff that we'd been talking about doing, we'd suddenly been ordered to do it, and to basically design it from scratch," Kooima recalls.

The Louisiana Legislature gave LSU permission to charge a special fee to pay for the master's program in digital media arts and engineering. Aubanel, a former EA executive, was hired to lead the program, which allows students to have a more intensive, specialized experience than is possible for an undergrad.

The two-year master's DMAE program, which has eight students today and likely will max out at 40 as it matures, launched last January. The AVATAR name for the digital media minor is being phased out and replaced with the DMAE label.

Technology evolves quickly, so it's impossible for LSU to teach every skill students will need in the workplace. Instead, they must learn how to keep their skills up to date—in other words, they have to learn how to learn.

"You give them tools that they're not comfortable with," Aubanel says. "That's the thing you have to instill in them: the bravery to explore new things."

Gaming can be the "gateway drug" that draws kids into computing, Kooima says, and many students who sign up for digital media classes start out wanting to make video games. But the skills students learn in the digital media curriculum, and in computer science generally, are useful to all sorts of companies.

"Suffice to say there are jobs in computing for everybody that we produce," Kooima says. "In pretty much any field you can imagine," Aubanel adds.

KEEPING THEM HOME

Kathryn Williams graduated from LSU in spring 2014 with the DMAE minor and a major in computer engineering. She now works for Gearbox Software near Dallas, which created video game brands such as Brothers in Arms, Duke Nukem and Homeworld.

Williams is a tools programmer. She says she makes things the company's artists and content developers "can use to make their lives easier."

"There is only so much that classes and book learning can [do to] help prepare you for jobs in the industry," she says. So the most valuable parts of her college experience were the team projects that allowed her to work with people from different majors, which prepared her to better collaborate with artists in the video game industry.

When asked what Baton Rouge could do to develop its local digital media sector so graduates like her might stay in town, she says it would help to have more fun stuff for young people to do. With any new industry, there's often a chicken-and-egg problem where it's hard to attract the workforce without the right companies, and it's hard to attract companies without the workforce. Her comment suggests that creating the right quality of life can help to resolve that dilemma.

Another important piece, Aubanel and Kooima suggest, is making computer science and programming an integral part of the K-12 curriculum

Aubanel worked for 20 years in Vancouver when EA and Radical Entertainment were the only game companies in town. Now, perhaps 50 companies are there, he says, which shows that rapid growth is possible.

Baton Rouge at least has the name brand visibility of EA and IBM, and New Orleans has Gameloft and High Voltage actually developing video games in Louisiana. Aubanel says he expects another game company to announce soon that it's coming to Louisiana, so maybe the state is nearing a tipping point.

David Jacobs October 28, 2015 | Business

Publish Date:

10-28-2015

Home | About | Research | Programs | News | Events | Resources | Contact Us | Log In | LSU | Feedback | Accessibility

Center for Computation & Technology 2003 Digital Media Center • Telephone: +1 225/578-5890 • Fax: +1 225/578-8957 © 2001–2025 Center for Computation & Technology • Official Web Page of Louisiana State University.