

Out and About the Community

Digital Games Conference

Alfred Thompson

There is a lot of buzz among computer science (CS) teachers about teaching CS using game development. But there are a lot of questions as well. Can you really teach the important CS concepts in a curriculum focused on game development? What teaching and development tools are available? Does it really work in classrooms? The Fourth International Conference on the Foundations of Digital Games is an event that tries to answer these questions and many more.

Organizers are eager for high school teachers to participate in the event. They understand the need for getting students interested in CS at an early age—before they get to college. They also believe that when teachers and students understand the value of the game industry to business and education, prejudices will diminish and excitement in CS will grow.

Previously known as Academic Days in Game Development and Computer Science Education (GDCSE'08), this unique conference brings together educators and industry experts to explore game research and the breadth of game use in CS education. This is a serious academic conference held in a locale that encourages networking and informal conversations like few others. The information is both forward looking and immediately actionable.

The agenda will include presentations on using games in first programming courses, new teaching tools, and using media such as music and art in CS. Industry leaders will describe the demand for serious CS skills and opportunities for students who can combine those skills with advanced mathematics and physics for exciting careers. Teachers will learn first-hand from higher education faculty about opportunities and CS programs so that they can better advise their students.

The Foundations of Digital Games Conference will be held onboard the Disney Wonder leaving from Port Canaveral, Florida, on April 26, 2009, with port calls in Nassau and Castaway Cay, Bahamas, and returning on April 30, 2009.

Information is available at the conference Web site foundationsofdigitalgames.org.

College Connection

Neumont University

Pat Phillips

Editor's note: *This dialog with Samuel K. Puich, Provost and Chief Academic Officer of Neumont University, is a continuation of our series of interviews with CSTA institutional members. Please share with your students these details about the computer science (CS) programs at Neumont University.*

The Neumont University campus is 48,000 square feet of glass, marble, and steel, located along the west bank of the Jordan River in South Jordan, Utah. The campus is situated within miles of some of the nation's largest technology employers including eBay, Oracle, Novell, and CA. Neumont University, founded in 2002, offers three degree programs: Associate of Science in Computer Science, Bachelor of Science in Computer Science, and Master of Science in Computer Science.

CSTA: What draws students to your program and what keeps them there?

Puich: Neumont University's "hands on," learn-by-doing formula is the key draw for our students. Although we lecture and discuss topics, students have the opportunity to use the tools, test the theories, and apply the principles in actual project environments.

In the first third of a student's program, the courses are designed to nurture professionalism, develop critical-thinking skills, and expand technical knowledge as they work in both individual settings and collaborative groups.

The second third of their education focuses on applying fundamental principles to solving problems and creating actual projects. Students take what they have learned, and under the facilitation of a professor, define, design, and develop a solution to a problem in their interest area.

In the final phase, students work under the direction of an actual company. They have the opportunity to develop applications and contribute to projects and assignments being completed by these companies.

CSTA: What skills can students acquire before college that will help them succeed in your program?

Puich: Because Neumont University is an accelerated program, the best skills that students can possess when they enter our doors are good study habits. Students should be prepared for the fast pace and be ready to work very hard. It is a challenging program but also very rewarding and satisfying.

Students should also have an adequate mathematical background. Although no CS experience is required, it is very helpful.

CSTA: What cool careers are your graduates prepared for?

Puich: Our students can prepare for a career as a software engineer, software architect, Web designer, mobile device developer, entrepreneur, software project manager, information technology consultant, information assurance and security expert, midrange platform developer and administrator, system administrator, digital designer, or a game developer.

CSTA: What topics will students study?

Puich: In addition to the technical topics, students will build a strong resume and portfolio with courses that build skills in professionalism, collaboration, communication (both oral and written), and problem-solving.

CSTA: Tell us a bit about the social environment of the CS program.

Puich: At Neumont, students have an opportunity to immerse themselves in our techno-centric environment and enjoy LAN parties, coding competitions, science and robotics clubs, and more. Plus, Utah is a great place to live! It's as diverse in people and cultures as it is in seasons and landscapes. More information about life in Utah can be found in the Student Living section of the Neumont Web site at www.neumont.edu/students. Currently 30 percent of our student population comes from Utah, with the other 70 percent coming from 48 states and 13 different countries.

Classroom Tools

Web Design Curriculum Available

Susan Boone

Like many teachers, I have found that rapid technology and curriculum changes have made it necessary to continually recreate my Web design curriculum over the years. So, keeping my curriculum