

## UF students use artificial intelligence to design computer games in class

JENNETTE VAN DIEN

Campus correspondent

Published: Tuesday, April 24, 2007 at 6:01 a.m.

After about 1,000 hours of combined work and a semester of presentations and lectures, students of the "Artificial Intelligence in Computer Games" course offered at the University of Florida got to show off their final products Monday.

The class of 50 juniors and seniors was given the semester-long task of creating, developing and promoting a computer video game using creative tools of their choice and inspiration from other group members.

Five games were developed with different themes. The idea behind artificial intelligence is to create a simulated living being, whether a human or a fictitious creature, and make it resemble reality as closely as possible.

One game includes some of the irreverent cartoon characters of "South Park," another involves a plane crash and a third, "Wil's Trip," involves a character, Wil, going into the video game world to find it is all mixed up. Wil has to save the video game world with Mario.

"Each level is different, so we had to start from scratch every time," said Yannick Perotti, 21, a computer science transfer student from France who said he spent about 150 hours on the game "Wil's Trip." "To create a game is a lot of work."

The project began with eight groups, each of which came up with an idea for a game and presented it to the class. Members of the class then voted on the games they thought would have the best chance of development.

Five ideas came out on top, and five groups were then created. The final event was held Monday in the Computer and Information Science and Engineering Building where the groups allowed other students and guests to play the games they had created.

"The gaming industry is huge. Gaming, moneywise, is larger than the movie industry," said Douglas Dankel, the course professor who pioneered the class to provide training he felt was lacking in the curriculum. "I saw this as a real good opportunity to involve teaching skills at the student level."

A UF professor for 28 years, Dankel teaches primarily "artificial intelligence" courses and said



Doug Finger/The Gainesville Sun

Yannick Perotti, 21, at left center, a University of Florida computer science major and lead designer of the video game 'Wil's Trip,' helps out gamers Miorel Palii, 19, at center, and Bobby Kirchgessner, 20, right, play the game Monday. Perotti and four other members of his class created the game, which is a mix of several popular Nintendo games. The class "Artificial Intelligence in Computer Games" teaches students about various techniques that make computer games more natural and lifelike through use of artificial intelligence. During the semester students have developed five games displaying intelligence behavior.

he based this course on presentations, since they are a big part of the gaming industry along with the research that goes into the presentations themselves.

"My feeling was that the best way for them to learn something is by teaching it," he said.

The class is comprised of multiple majors. The majority of students are computer engineering students, however computer science students and digital art students are also in the class.

One student in the class has already found a job at an area gaming company and two other students have found jobs that they will start after graduation.

Computer science junior Nate Fouts, 21, worked on "Wil's Trip." He said the complexity of the project had its benefits, but the detail involved was difficult.

"It was good because each of us could work on a different level," Fouts said. "To create an in-depth game takes a lot of time."

The games will be graded and evaluated by Dankel and teaching assistant Jonathan Ohlrich, a Ph.D. student. The games will be evaluated based on how well the storyline is written, how much the game captures attention and how well it deals with Artificial intelligence topics such as pathfinding and flocking.

Pathfinding, Dankel explains, is how well the computer character finds its way through a maze. He said flocking is how well a group of animals or other characters move together in the game. Both deal with graphics, which is key to a game, but overall is not a big concern with grading.

The games will also be evaluated by classmates.

"It's hard to put them together against each other because they used different tool sets," Ohlrich said. "It's hard to pick a clear winner."

<a href="#">CONTACT US</a>	<a href="#">ABOUT US</a>	<a href="#">ADVERTISING</a>	<a href="#">SUBSCRIBE</a>	<a href="#">WORK FOR US</a>	<a href="#">HELP</a>	<a href="#">PRIVACY POLICY</a>	<a href="#">CORRECTIONS</a>	<a href="#">RSS</a>	<a href="#">TERMS</a>
<a href="#">OF SERVICE</a>	<a href="#">PHOTO REPRINTS</a>	<a href="#">SITE MAP</a>							