Review
INSTITUTE for SIMULATION & TRAINING
University of Central Florida Summer 2004

M&S graduate enrollment surges ahead of original estimates

The resounding success of the two-year-old modeling and simulation master's and Ph.D. program at the University of Central Florida has fueled discussion among academics about the advantages of a multidisciplinary approach to a degree.

The program accepted its first students in 2002, after several years of planning led by IST. For a local news story in June of that year UCF predicted up to 20 students would enroll in the first classes.

But in two short years, the program has grown to 120 students and by the end of summer will have awarded master's degrees to 30 graduates. The first five doctoral degrees may be conferred this

continued on page 3

UCF's M&S graduate program...

- ❑ Master's, PhD
- ❑ Multidisciplinary...
  - ✓ Computer science
  - ✓ Engineering
  - ✓ Digital media
  - ✓ Psychology
  - ✓ Mathematics
  - ✓ Business
  - ✓ Statistics
- ❑ Graduate support
- ❑ Websites...

www.graduate.ucf.edu
www.ist.ucf.edu/phd

'Amazing' experience awaits student subjects in augmented navigation experiment

Shortly after 3:00 a.m. a search and rescue team responds to a frantic report of a drug overdose victim having convulsions. Location is a derelict office building near the rail yards.

Arriving at the scene within minutes, a search team paramedic shrugs into a vest containing a mini computer and position tracking equipment. He dons eyeglasses that support a miniature display device near one eye.

A floor plan of the maze-like building interior was loaded into the mini computer enroute to the scene. At a once-boarded-up doorway the paramedic calibrates the team's location and the eyepiece screen immediately displays a schematic of the building interior with the team's position indicated.

Assisted by the "heads-up" miniature display, the paramedic team rapidly explores the building's dark corridors, arriving at the scene of the overdose in time to administer life-saving first aid.

To add a stress component to the experiment researchers required subjects to stop, in sequence, to fill out question-naires placed in the maze's corridors.

Firefighters, police, soldiers and rescue teams often must traverse unfamiliar building spaces under less than optimum conditions. Every wrong turn or minute lost could mean the difference between success and tragedy.

Experiments underway at IST may, in a not-to-distant future, lead to wearable navigation aids just like the one assisting this hypothetical paramedic team.

In anticipation of this technology advance, the institute is attempting to determine what type of augmented reality display information best and most seamlessly facilitates navigation performance over unfamiliar terrain.

IST's deputy director Brian Goldiez is leading the research, assisted by graduate students Radhey Shah, Jeff Dawson and, until recently, Daniela Kratchounova.

The experiment is part of an augmented reality research project sponsored by the Office of Naval Research. Florida Congressman Ric Keller and Senator Bill Nelson were supportive in getting this project funded.

The equipment being used was provided to IST under an agreement with the Army Research Institute.

To create a trackable search environment the team constructed a multi-

See **Wearable** *on page 2*