Computer team's success doesn't come easy

By Sarah D. Andre

The University of Central Florida computer programming teams boast an impressive record of placing among the top three universities in the Southeastern regional computer programming contest every year since their first competition nine years ago.

One of UCF's two programming teams won first place and Florida International University won second place in this year's regionals, delivering spots in the international competition to both universities. Florida state universities swept the regionals, placing in the top four positions out of a field of 50. UCF competed against universities in seven states, winning over powerhouses such as Auburn, Clemson, Mississippi, Vanderbilt, Georgia Tech, and Duke.

UCF has competed in two interna-

Team places fifth in internationals

The University of Central Florida's student computer programming team placed fifth in the 15th annual Association of Computing Machinery Scholastic Programming Contest in San Antonio, Texas.

The UCF squad finished behind Stanford University, the Free University (Amsterdam, the Netherlands), Virginia Tech and Victoria University of Wellington (New Zealand).

Other universities represented

in the final field of 22 teams included Harvard University, Brown University, the University of Pennsylvania, Columbia University, the University of Virginia and the University of Texas. Each finalist placed either first or second in regional competitions involving more than 350 colleges and universities worldwide.

For its fifth-place finish, UCF was awarded a $2,000 scholarship provided by AT&T Computer Systems, the sole sponsor of the contest finals.

tional competitions so far, placing fourth in 1986 and winning second place behind Stanford University in 1987. "When you realize that second in the international competition really

means second in the world, you can't be too unhappy with that kind of a finish," said Ali Orooji, professor of

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computer science and faculty advisor for the computer programming team since 1989. In the international competition, UCF goes up against technology giants such as the Massachusetts Institute of Technology, Harvard and UCLA.

The key to UCF's consistent success has been, like any competitive sport, a carefully thought-out game plan perfected through long hours of practice.

"We try to duplicate everthing that happens at the regional and international competitions," said Orooji.

Two teams of four, plus two alternates, are selected in early September from the top 10 finishers in individual competition. Order of finish doesn't dictate team composition as much as specific programming expertise. Each problem in the competition has a different application: engineering, geometry, algorithms or simulation. "We don't want all four students on each team to have expertise in the same area," notes Orooji. This year's first place programming team members are sophomore Peter Popovich, senior Robert Franceschini, and post-graduate student Mark Schnitzius, all computer science students, and junior Chris Gouge, a student in the College of Engineering.

Every Saturday, the first-place team, the alternate team, the two team alternates, and coaches get together for eight grueling hours of practice. The first hour is spent reviewing strategy and tactics. Then the program-

mers on the first-place team face off against the alternate team in mock competition, with alternates and team coaches acting as judges. The teams must solve as many of about eight problems as they can in five hours — the same amount of time allotted during the international competition. The computer science faculty design problems similar to those encountered in competition.

Each team has only one computer, making efficient computer time management a critical factor in creating a winning strategy. Schnitzius is first at the computer with the first "banger," a fairly simple program that can be solved quickly. Gouge, the engineering student, knows he will solve the text or report-generating program, usually the most technically difficult and complex. He and his teammates know that he will probably spend most of the contest time on this one problem. Popovich and Franceschini ferret out the graphing (linking) and algorithm problems. While Schnitzius finishes with his first solution, the others begin solving their problems on paper.

Stress and frustration mount as the competition progresses. Judges may submit rulings that don't make sense. Arguing wastes time and increases frustration, so the students learn to accept all judgements. "If they say two plus two is five, you have to work with that decision and go on from there," said Orooji.

Juggling computer time is a source of tension. Most programmers work out solutions directly on the computer. The students have to learn to work out problems first on paper, then enter solutions when their time on the computer, divided into five-minute increments, comes up. "If one programmer is close to a solution and is on the computer, it's hard to yield his time to someone else," explained Popovich. Tempers can flare. The team's intensive practice sessions help the students deal with the extreme pressures of competition.

The long hours of practice are over. In the last seven months, the computer programming team has logged at least 120 hours of practice and has solved about 150 programming problems. Their victory in November was by the largest margin ever, leaving the team members with a tremendous amount of confidence in their game strategies. On March 6 UCF's number one computer programming team, first in the Southeastern region, went head-to-head against the giants of technology. They were cautiously optimistic. "Any number of things enter into consideration," said Popovich. "We expect to finish in the top five."

No matter what the outcome in San Antonio, however, the UCF computer programming team still has reason to be proud of their accomplishments, and the UCF community has cause to celebrate the programming team's commitment to excellence.