

## Mizzou Chapter

In July, 2006, thanks to the determination of Professor James Keller, the IEEE Computational Intelligence Society—Mizzou chapter was officially formed.

The chapter initially had only the minimum number of members, but it has continually grown, especially with new student members. Today, less than a year later, the chapter aggregates more than twenty five members.

In fact, attracting student members to Mizzou chapter has been the goal of its members from their very first meeting. For that same reason, the chapter's first activity was promoting the First Mizzou-CIS Student Poster Competition in November of 2006—just a few months after its creation.

The competition was indeed a great success. There were some very interesting and mature research presented, and everyone was particularly pleased to see that the competition attracted students not only from the purely computational intelligence area, but also from life sciences, power electronics, and communication and signal processing.

Twelve students entered the competition, and with a donation from the University of Missouri-Columbia's College of Engineering, three prizes (\$150, \$100, and \$50) were offered.

The winners of the competition were: Mr. Derek Anderson in third place with the work titled “Real-Time Recognition of Falls from Silhouettes;” Mr. Timothy Havens in second place with his research on the “Use of Particle

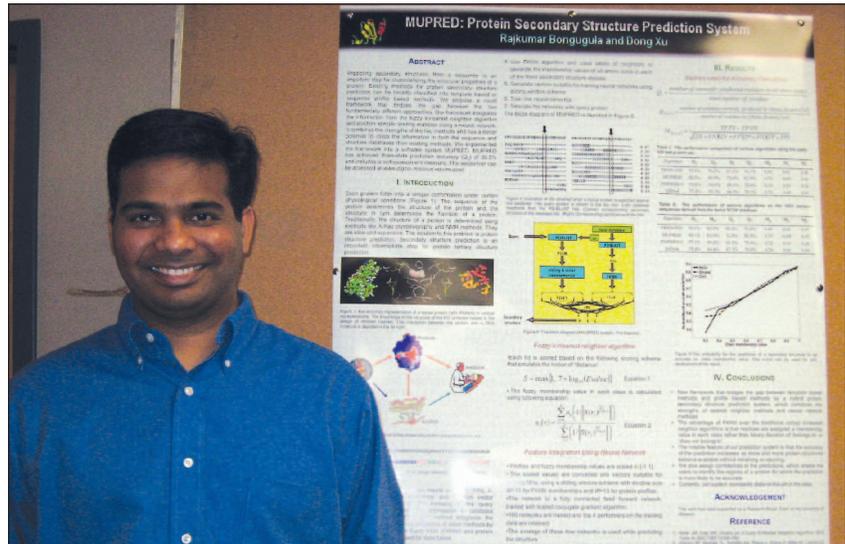


FIGURE 1 Mr. Raj Bondugula, the winner of the First Mizzou-CIS Student Poster Competition.



FIGURE 2 Two of the judges listening to Raj Bondugula's presentation. (left, in a white shirt, Professor Tyrer from UMC; center, Professor Pablo Estevez, from University of Chile and CIS Distinguished Lecturer Program chair; and right, Mr. Raj Bondugula).

Swarms and GPUs in Video-Based 3D Human Pose Estimation;” and finally, Mr. Raj Bondugula received the first place prize for “MUPRED: Protein Secondary Structure Prediction System.”

In his work, Mr. Bondugula presented a novel framework that bridges the gap between the two fundamentally different approaches for protein secondary structure prediction: the template-based and the sequence profile-based methods. In his framework, the information from the fuzzy k-nearest neighbor algorithm and the position specific scoring matrices using a neural network are integrated, achieving three-state prediction accuracy (Q3) of 80.5 percent.

Besides the quality of the research presented, the importance of the event was in the fact that inexperienced students had the chance to experience a competition like this in their “home field,” and get better prepared for future, broader, and more competitive situations.

Simultaneously with the Poster Competition, the Mizzou CIS Chapter organized the visit of Professor Pablo Estevez, a distinguished lecturer from the University of Chile. The event was coordinated with the support of the IEEE-CIS Distinguished Lecturer Program and was coordinated with Mizzou’s sister chapter, the St. Louis CIS Chapter at Rolla. Professor Estevez presented a seminar on “Data Projection and Visualization Using Self-Organizing Neural Networks.”

A few other visits have been organized by the Mizzou-CIS chapter, such that of Professor Brian Scassellati, from Yale University. Dr. Scassellati presented a seminar on “Social Robots and Human Social Development.”

Another seminar on “Evolvable Hardware: Using Methods from Nature to Design and Maintain Electronic Systems” was recently organized by the chapter and presented by Professor Gary Greenwood, from Portland State University.

Many other events are being planned for the second semester of 2007, including the visit of two other IEEE CIS Distinguished Lecturers and, of course, the Second Mizzou-CIS Student Poster Competition.

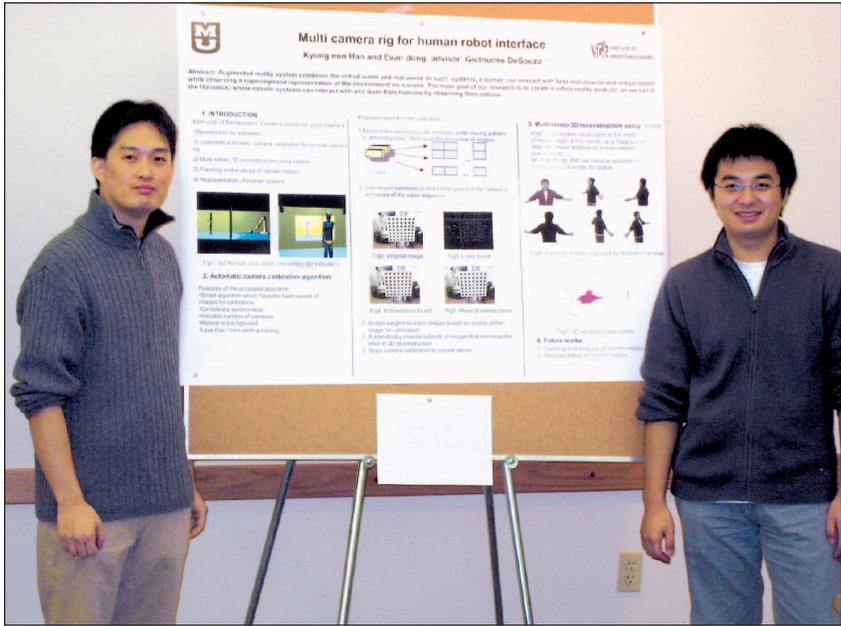


FIGURE 3 Other students (Evan Dong and Kyung Min Han) participating in the First Mizzou-CIS Student Poster Competition.

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