



Monday, November 3, 2003

## Student receives space consortium grant

By **Jeff Samoray**, *OU Web Writer*

Aiyesha Ma, a master's student in computer science and engineering, is the recipient of a prestigious grant for research that is literally out of this world.

Last May, Ma received a \$5,000 grant from the **Michigan Space Grant Consortium** as part of its undergraduate and graduate fellowship program. She is conducting research on methods of categorizing satellite images collected by NASA. The consortium offers a total of \$125,000 in the form of graduate and undergraduate research and public service fellowships to students in aerospace, space science, earth system science and other related science, engineering or mathematics fields. The funding interval for the grant is from May 2004 through April 2005.

"NASA collects a tremendous amount of information in the form of satellite images and other data," said Professor of Engineering and Chair of Engineering and Computer Science Ishwar Sethi, Ma's faculty mentor. "It's one thing to collect this data and another to manage and use it. Some of the techniques Ma is developing will help in the use of this data."

Ma's goal is to develop a technique that will enable computers to automatically annotate satellite images of shapes and objects on Earth, thus allowing for automatic cataloging into a searchable database. In a separate project, Ma also is working with Sethi on research related to post-operative cardiac patients.

"We are working on a database of 40,000 to 50,000 patients," Sethi said. "Based on the data collected, we are trying to build a predictor model that can give an indication of what kind of post-operative complications there will be following a particular surgery. Such a model will help reduce health care costs and provide better treatment for patients."

Ma transferred to Oakland as a senior in 2002 after participating in OU's Undergraduate Computer Research Program (UnCore), which encourages female undergraduates to pursue graduate study and research in this field. Her undergraduate experience was so positive she decided to pursue more research at Oakland as a graduate student.

"Aiyesha is a wonderful student," Sethi said. "She's really interested in research and goes the extra mile to get the job done."

Visit Oakland's **Department of Computer Science and Engineering** Web site for more information on its courses, faculty and the UnCore program. Visit the **Michigan Space Grant Consortium** Web site for more information on its grants and programs.

### SUMMARY

Aiyesha Ma, a master's student in computer science and engineering, is the recipient of a prestigious grant for research that is literally out of this world. Last May, Ma received a \$5,000 grant from the Michigan Space Grant Consortium as part of its undergraduate and graduate fellowship program. She is conducting research on methods of categorizing satellite images collected by NASA.

Created by CareTech Administrator (webservices@caretechsolutions.com) on Monday, November 3, 2003  
Modified by CareTech Administrator (webservices@caretechsolutions.com) on Monday, November 3, 2003  
Article Start Date: Wednesday, November 12, 2003