Robots Are Ready to Rumble

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IN AN AGE when single robots can vacuum, mow the lawn and assist physicians in surgery, the idea of entire robot teams coordinating their own tasks is anything but wacky.

In fact, it's reality. Researchers from the USC School of Engineering's computer science department, along with colleagues from across the country, are expanding the capabilities of teams of autonomous robots in two ongoing group robotics projects: "Software for Distributed Robotics" and "Mobile Robot Software."

"Getting a group of robots to communicate with each other and collaborate on specific tasks is extremely difficult," said USC's Gaurav Sukhatme, assistant professor of computer science and principal investigator on the "SDR" and "MARS" projects.

"But if we can develop computer programs that enable robot groups to make sensible decisions together, it would allow robots to deal with unexpected situations. It would be particularly beneficial in constantly changing situations, such as natural disasters or military environments, where even humans have trouble," he added.

Funded by the Defense Advanced Research Projects Agency, SDR aims to enable 10 sophisticated robots to lead 90 similar teammates into an unknown building. Once inside, all 100 robots, each roughly 2 feet tall, continued on page 5.

ASB Students Return to Campus Exhilarated

More than 120 USC students used their spring breaks to do good works both domestically and internationally.

ON MEXICO'S Isla de Mujeres, USC students spent their spring breaks administering medicine to turtles, clearing seaweed from the beach to be used to protect trees in another area, painting baseball bleachers with local kids, and preparing an archeological dig site for tourist visitation.

"The Isla trip was amazing," said Michelle Blanchette, director of the USC Volunteer Center's West, who also coordinated the trip. Turtles have existed on the island for a long time, she said, but are now an endangered species.

"The Island Turtle Farm exists to cultivate more for study and research on how to preserve them in a meaningful way," she added.

THE EVENT was one of 15 programs held by the Annenberg Institute for deepening public understanding of social justice issues and the role of the press.