

Warwick students take rescue robot to RoboCup Rescue Championship

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(PhysOrg.com) -- University of Warwick (UK) students are poised to take their "rescue robot" to the RoboCup Rescue Championship in Germany next week. The students developed their robot in a team project bringing together Engineering and Computer Science students and and they will soon be on their way to the 9th RoboCup German Open in Magdeburg from April 15-18.

The robots are designed to crawl over and through difficult terrain or such as destroyed buildings in search of trapped survivors. The German competition will put Paul's <u>robot</u> through its paces in a simulated disaster environment which requires robots to demonstrate their capabilities in mobility, sensory perception, planning, mapping, and operator



interfaces, while searching for simulated victims in difficult environments.

The Warwick team think they have a competition winning trick with their rescue robot as they have constructed it with a <u>robot arm</u> which has "4 degrees of movement" this gives that arm more turning flexibility than even the head of an owl. This allows the arm to turn and weave in tight situations and change its orientation without having to move the whole robot. The team also has a second rescue robot is also under development which will have its own mapping capabilities using LiDAR technology (Light Detection and Ranging).





The team's academic project Director is Professor Ken Young from WMG (Warwick Manufacturing Group) at the University of Warwick. He says:

"This project gives our students hand on experience of solving a real world engineering problem. Not only will they learn practical lessons such as how to integrate leading technology to create a practical working solution they may also come up with their own truly innovative ideas that could be taken up by technology companies and make the <u>students</u> even more sought after as employees of high tech engineering firms."

Provided by University of Warwick

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