**Linux-based robot sub wins top award**

ajay_bhargav, Fri Oct 16 2009, 09:20 pm

Cornell University undergraduates have developed an autonomous underwater vehicle (AUV) that runs Debian Linux on a 2.2GHz Intel Core 2 Duo. The 50-inch mini-sub won first place in the 12th annual Autonomous Underwater Vehicle Competition, and was the first AUV to complete the entire course since 2002.

Developed by the cross-disciplinary Cornell Autonomous Underwater Vehicle Team (CUAUV), whose 35 undergraduate students represent 13 majors and three colleges, the Nova is an improvement on the group's previous Triton sub design. This August, the Nova won first place in the 12th annual Autonomous Underwater Vehicle Competition, sponsored by the Association of Unmanned Vehicle Systems International and the Office of Naval Research.

**The CUAUV's Nova in the tank**

The competition, which was held in an acoustic testing pool operated by the US Navy SPAWAR (Space and Naval Warfare Systems Command) Systems Center, has seen other Linux-based entries in past years, such as the Georgia Institute of Technology's Mongoose in 2005. The Nova was the first winning entry from Cornell since 2003.

**The Nova and its creators**

The Nova maneuvered through the entire course without human intervention, says the CUAUV. Tasks included passing through a gate, following a path, ramming a submerged buoy, firing through a square target with small torpedoes, dropping markers into bins containing simulated targets, and recovering a PVC target and surface through an octagon shape.

Read the complete story [Linux for Devices]