

Publication: Bangalore Mirror;Date: Nov 5, 2009;Section: City;Page: 2;



# Robot that can do 'chores'

A venture by engineering graduate develops a low-cost robot that can go underwater and clean water or chemical tanks



Pulkit Gaur

NISHANTH S COONTOOR

Cleaning a water tank meant one had to find someone to do the job. In other words, you had to depend upon someone else. Not anymore. Now, you have a robot that can take care all these cleaning needs at home.<PI>

Developed by Gridbots, an entrepreneurial venture by Pulkit Gaur, an engineer graduate, this low-cost robot will remove any sludge particles in water.

In Mysore to take part in the Technology, Entertainment, Design (TED) conference at the Infosys campus, Pulkit told Bangalore Mirror, "This compact machine has tracks fitted for movement. It has a drive system on the front side to which a brush mechanism is attached to scratch dirt from the tank walls."

He said a powerful motor attached to it removes the dirt from the tank. "We are also considering using a filter," he said.

## CONSUMER VERSION

This robot could cost you Rs 15,000 to Rs 20,000 and is a consumer version of SaUsR, the robot that is already in use in medicine industries. "SaUsR carries out underwater operations with ease and lets you use this robot as a sophisticated underwater cleaning unit. It has on-board intelligent electronics that lets it navigate in fully-autonomous mode. With a high resolution on-board camera having pan-tilt capabilities, it can spot even minutest details of your wa-



**SaUsR**  
Smart Underwater Robot



**GRIDBOTS' ROBOTS**

- Industrial Robots: Robotic Manipulator, Robotic Gripper, Precise Rotating Base, SaUsR - Underwater Operations Robot, Hydra-Underwater Inspection Robot
- Educational Robots: Aviator-Research Robot, Abacus-Robotic Controller, Precise Rotating Base, Turtle-Do It Yourself
- Consumer robots - autoGRID - Personal Home Robot for domestic help and security



**TURTLE**  
Do It Yourself Robot

**BANGALORE MIRROR**  
**MIRROR SQUAD** 

start a venture that would come up with innovative products that run on intelligence. I wanted to do something more than the assembly of robots. It had to be a multi-purpose product for my client," he said.

Gridbots, which started two years ago in Ahmedabad, presently employs 15 people. It plans to recruit 35 more by this year-end.

A production and industrial engineer from MBM Engineering College, Todhar. Pulkit

and consumer robots.

Pulkit, whose resume goes up to 17 pages, was appreciated by former President A P J Abdul Kalam for his efforts. It also motivates him to see many students exploring robotics.

"During a seminar we presented at IIT Roorkee recently, I was asked many questions on robots designed to perform particular tasks. I, however, refrained from giving out the solution. Instead, I made them understand the concepts be-

ter/chemical tank.

These robots are targeted at those who make medicines. They employ them to prevent sludge formation in tanks. 'We had other firsts like an image-understanding technology and a consumer robot that does household chores,' he said.

#### **A START-UP**

Gridbots was a start-up that took shape through his passion for robotics. 'I wanted to

graduated in 2004. 'I have been working on these bots since school days. Earlier, it was all about taking part in competitions. I soon realised robotics was in its nascent stage, and a lot can be built on it,' he said.

His initial focus was on developing technology products, something that will make him different from other firms.

They design and manufacture robotic products for three verticals - industrial, educational

hind these. The educational Turtle robot, that can be assembled by school students, have sold more than 1,000 units. Robotics is all about understanding Physics and Mathematics using common sense,' he said.

He already has plans chalked out for his company. 'We are working on developing defence robots, and also a surveillance robot that can be controlled via mobile or the Internet,' he added.