

euRathlon 2014

29th September - 3rd October 2014,

La Spezia, Italy

Team Information Form

Team Details

Team Name: Shark

Institution/Company: TeCIP Institute – Scuola Superiore Sant'Anna, Pisa, Italy

Logo:



Website: www.cgsrobotics.it -

Home location of team: Gustavo Stefanini Advanced Robotics Research Center, La Spezia, Italy

Name of team leader: Eng. Massimo Satler PhD

Picture of team leader:



When was the team established (year): 2013

Team Description (including names of the team members):

The team is composed by research collaborators, post-Doc members and a PhD student witch work at the Gustavo Stefanini Advanced Robotics Research Center (CGS) or at the PERCRO Laboratory. Both the centers are within the TeCIP Institute of the Scuola Superiore Sant'Anna, Pisa, Italy.

The team members in an alphabetic order are the following one: Alessandro Di Fava; Nicola Giordani; Daniele Leonardis; Gastone Rosati Papini; Massimo Satler; Matteo Tanzini; Paolo Tripiccho; Matteo Unetti. The academic tutor is Carlo Alberto Avizzano.

All members have previous experience in autonomous systems in the air and land domains and are willing to apply research ideas in the underwater domain as well. Being part of the CGS, the members were already been involved in several European and National research projects focusing on autonomous robots, cooperation of heterogeneous units, computer vision and machine learning techniques. CGS has already participated to some robotic competition, like for instance the Robotour competition organized by the Mathematics and Physics department at the University of Prague.

Team Sponsors (if any): no sponsors


Contact Details

Team E-mail: massimo.satler@sssup.it

Institution/Company: TeCIP Institute – Scuola Superiore Sant'Anna, Pisa, Italy

Address: Via Valdicocchi 15, 19136 La Spezia

SCENARIO SELECTION AND VEHICLE(S) SPECIFICATION

SCENARIO SELECTION PER VEHICLE									
Vehicle name	SPARUS II	Team name	Shark	Team leader	Eng. Massimo Satler, PhD				
		Age of current vehicle	Will it participate in SAUCE'14? If so, specify budget.	EURATHLON 2014: Selection of scenarios (please check all scenarios you wish to enter with this vehicle)					
		Less than a year	YES 0,0€	<input checked="" type="checkbox"/>	Long range autonomous underwater navigation				
				<input checked="" type="checkbox"/>	Environmental survey of the accident area (mapping)				
				<input type="checkbox"/>	Leak localisation and structure inspection				
				<input type="checkbox"/>	Interaction with an underwater structure (manipulation)				
				<input type="checkbox"/>	Combined scenario				
VEHICLE SPECIFICATIONS									
No. of Thrusters	Thrusters Brand	Thrusters Type	Machining used in the process	Materials used	Software used for mechanical design	Onboard Computer	Software	Wireless Comms	
3	/	Brushless DC motor with magnetic coupling	CNC machine 3D printer	Alluminium Plastic	/	PC104 computer (ADLQM67P C)	Ubuntu / ROS	YES	
Sensory payload	Does the AUV include BMS?	Please, specify Sonar (if any)	Model of the Sonar	Please, specify which IMU (if any)	Model of the IMU	Connectors	Other electronics	AUV value	
IMU from Analog Devices; pressure sensor from Keller;	YES	1 Sonar	PcFF80 sonar	1 IMU	/	Standard circular SubConn® connector	/	33000€	

OEM DVL from LinkQuest; GPS; Cameras; Sonar								
---	--	--	--	--	--	--	--	--