## Accommodations and Transportation

A block of rooms has been reserved at the:

Hilton Hill Country Resort & Spa
9800 Westover Hills Blvd.
San Antonio, TX 78251
(210)-509-9800

To reserve your room at the special $120 rate + $30 resort fee, please use this link.

A shuttle will be provided to and from the hotel, departing each day at 8:15 AM.

A rental car is not required; airport to hotel shuttles are available and taxis are approximately $40.

## Registration

Please register here:
http://rosindustrial.org/training-registration

The ROS-Industrial *Consortium* is a membership organization. Training is free to dues-paying members (limit three seats per Full member, two seats per Associate member, and one seat per Research member ). Others may attend for a fee of $2,199.

Class Prerequisites:

Basic understanding of programming (C++ preferred), Ubuntu Linux, and Linux command line. If Linux and C++ are new to you, complete the prerequisites of the online curriculum for background.

For more information, please contact:
Paul Hvass
paul.hvass@swri.org
+1 (210) 522-5823

http://rosindustrial.org/events/2017

# :::ROS™
### industrial consortium americas

# Basic Developers' Training

Program and Agenda

# February 13 – 15
Southwest Research Institute®
San Antonio, Texas

# Join Us!

The ROS-Industrial Consortium Americas is hosting a ROS-Industrial Developers Training Class February 13-15, 2017 in San Antonio, Texas. The class will run three full days. Please bring a laptop to the class with the ROS-I training Virtual Machine pre-installed. This class is geared toward individuals with a C++ programming background who seek to learn to compose their own ROS nodes. Day 1 will focus on introductory ROS skills. Day 2 will examine motion planning using MoveIt! as well as the Descartes planner and perception concepts. Day 3 offers a lab programming exercise (with a choice of): Pick-and-Place Application, Descartes Application.

*The Open Solution for Advanced Automation Software*

## Meeting Location



*Southwest Research Institute*

6220 Culebra Road
San Antonio, Texas 78238
Building 68
Google Map

## Agenda

| February 13 Classroom | | |
|---|---|---|
| | 0815 | Shuttle Departs the Hyatt Hill Country |
| | 0835-0900 | Sign-in, Introductions, and Agenda |
| | 0900-1015 | ROS Setup, Catkin, Installing Packages |
| | 1015-1030 | Break |
| | 1030-1200 | Creating Packages/Nodes, Topics, Messages |
| | 1200-1300 | Lunch (Provided) – SwRI Overview Presentation |
| | 1300-1430 | Services, Actions |
| | 1430-1445 | Break |
| | 1445-1700 | Launch Files, Parameters |
| | 1720 | Shuttle Departs for Dinner |
| | 1800-1945 | Group Dinner at Acenar on the Riverwalk |

| February 14 Classroom | | |
|---|---|---|
| | 0815 | Shuttle Departs the Hyatt Hill Country |
| | 0835-0900 | Recap and Agenda |
| | 0900-1015 | URDF, Workcell XACRO |
| | 1015-1030 | Break |
| | 1030-1200 | TF, Build a MoveIt! Package |
| | 1200-1330 | Lunch (Provided) – SwRI Lab Tours |
| | 1330-1500 | Motion Planning Using Rviz, C++ |
| | 1500-1515 | Break |
| | 1515-1700 | Descartes Path Planning, Intro to Perception |
| | 1720 | Shuttle Departs for Dinner |
| | 1800-1945 | Group Dinner at Two Bros. BBQ |

| February 15 Lab | | |
|---|---|---|
| | 0815 | Shuttle Departs the Hyatt Hill Country |
| | 0835-0900 | Recap and Agenda |
| | 0900-1030 | Building a Perception Pipeline, Recap |
| | 1030-1045 | Break |
| | 1045-1200 | Lab Introduction, Lab Time: (1) Pick and Place Application, (2) Descartes Application |
| | 1200-1245 | Lunch (Provided) |
| | 1245-1530 | Work on Lab Applications |
| | 1530-1600 | Wrap-up, Surveys |
| | 1600 | Shuttles Departs for Airport and Hotel |