Autonomous robot development - Internship

Workplace: 28906, Madrid

Apply online!

Your responsability:

- As an intern, you will join a specifically defined project to evolve and develop our Philobot, which is based on an RC car model, equipped with a small single board computer (in this version a Raspberry Pi). The Raspberry Pi serves as a computing resource to control Philobot's stepper motors for steering and driving.

  Philobot is connected via WiFi and Bluetooth to a server system with many more computational resources that can and should also be used for processing. In this setup, we can even implement and test scenarios where Car2X and Car2Car functionality can be realized with cloud services deployed on the server backbone (platooning, traffic routing, street conditions,...).

  To allow testing of all developed functions in a controlled environment, we also offer a test environment in the form of a 1:32 scale miniature racing track ("Race Track"), which in addition to simulating the track will also be used to simulate live traffic on multiple lanes.

  In this project, you will collaborate in the definition of the project, establishment of objectives,

What you bring along:

- Studying Degree in Computer Science, Software Engineering, or related field. It is necessary to have the possibility of signing an internship agreement with an university or a study center.
- High level of English.
- Knowledge of programming with C ++ and object orientation.
- Ability to work independently and in a team, with a proactive and problem-solving approach.
- Curious and self-taught person willing to take on technical challenges.

development of the code and testing of new functionalities. The objective will not only be to create a useful and functional tool, but also to learn to work with the technologies that our engineers use in their daily lives, such as C++, Git or Jenkins, so that you can join projects with clients in the future.

Main responsibilities:

- Learn to analyze, design and develop software applications based on high-level requirements.
- Deep into the knowledge of C++ (2014 Standard).
- Use of open source libraries Open Computer Vision (OpenCV) along with Robot Operating System (ROS).
- Research and development of computer vision and artificial intelligence techniques.
- Learn about specific tools/processes involved in the software engineering domain: requirements traceability tool, task manager, integrated development environment, version control, configuration management and code review.

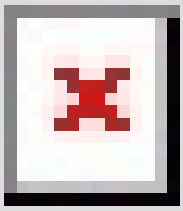
Make your next career step and apply today! We are waiting for you :)

We are Bertrandt.

An independent and international development service provider with long years of automotive expertise. With cross-industry know-how and a holistic understanding of systems and products, we create technological solutions at any stage of the product development process.

We deal with a focus on hot topics such as digitalization, e-mobility and autonomous systems, mainly for the automotive, aerospace and mechanical engineering sectors, and consistently facilitate the development of tailored solutions in these areas.

Our goal: to accelerate technological progress and make a relevant contribution to a sustainable future. We work on this every day – with around 14,000 employees at more than 50 sites worldwide



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