Company Description

https://www.tecnalia.com/en/about us

Information

📅 Deadline: 2021-02-14
🗂 Category: Business
🚩 Province: Gipuzkoa

💲 Country: Basque Country
🏛 City: Donostia - San Sebastián

Company

Tecnalia Research and Innovation

tecnalia

Main functions, requisites & benefits

Main functions

To work on projects in C++ and Python in a Linux-based environment, use Python to analyze data, find problems, and improve algorithms. To test code in simulated environments – software and hardware in the loop (SIL, HIL). To develop prototypes to explore new ideas and work in iterative development cycles. To implement new and existing algorithms to improve control, estimation, and computer vision techniques in drone related applications. To keep up-to-date on technologies and methods for autonomy, estimation, control, and computer vision. To work with sensors commonly used on drones: IMU, GPS, EO/IR cameras, and radar. To keep up-to-date on the state-of-the-art of drone technologies and methods for autonomy, estimation, control, and computer vision. To solve new software problems in a variety of projects.

Requisites

Expertise in C++ and Phyton programming on Linux systems. Experience with Matlab/Simulink. Experience with flight control systems and specific autopilots, PX4 flight stack, Dronecode SDK, MAVlink, low level communication (UART, SPI, CAN, I2C). Desired experience with DSP/FPGA embedded systems. Desired experience with Robot Operating System (ROS) is preferred. Desired experience with real-time embedded systems, system identification, state estimation and control of UAVs, as well as high-speed communication protocols. Desired experience in flight testing UAV software and electronics.