Autonomous indoor drone

Integration of new sensor

Born and raised in B2B connectivity, we combine innovation, expertise, and incredible talent into (mobile) connectivity solutions that will grow both businesses and society. 0G to 5G. Citymesh is the European leader and expert in the construction of private 4G & 5G networks and WiFi as a Service, with +50 MPNs deployed.

Context of the internship

With more than 70 Drone-in-a-boxes deployed all over Belgium Citymesh has become the European leader of autonomous drone systems. However these drones as of now are only capable of flying outdoor.

In this internship you will work together with the Citymesh research team to develop a small indoor drone that will be used by the team to research various topics like vision based navigation.

The goal

1. Requirements gathering with all stakeholders (research, drone team & customers)
2. Perform market research on possible existing solutions / parts of the solution
3. Creation of bill of materials
4. Mechanical & 3d design of the drone
5. Assembly of the drone

Expected Results:

- At the end of the internship we hope to have a working proof of concept of an indoor drone.
- Furthermore we would like to have an understanding of what would be the required steps to go from the proof of concept to a commercialized solution.
- As this project will be used by our team, we require well written documentation

Mentor: Nico Van Hevel

Our approach

We strive to provide comprehensive coaching and furnish students with supplementary resources and training as required. Our interns benefit from the constant support of a dedicated mentor who can readily offer assistance. Joining us means being part of a vibrant and youthful team, working in a cutting-edge technological environment.

Student profile

Background and Education:

- Any student studying within the field of electronics,(mechanical) engineering, ...

Skills and Qualities:

- Programming skills are not required, but could be a plus.
- Knowledge of mechanical and 3d design
- Knowledge of basic electronics & communication methods (i2c, SPI, Uart,..) is a plus
- Eagerness to learn is most important!

Interested?

Contact Jens Buysse (jens.buysse@citymesh.com and Céline Vileyn celine.vileyn@citymesh.com) with your CV. We have other internships available as well! Don't hesitate to contact us.