

# INTERNSHIP

## ROBOT DOG IMPLEMENTATION

*Born and raised in B2B connectivity, we combine innovation, expertise, and great talent into (mobile) connectivity solutions that will make both businesses and society grow. 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 MPN's deployed*

*On top of these MPNs we also provide several connected devices. One of these new connected devices is our robot dog HAPPI.*

### The goal

At the end of the internship we hope to have a good overview of the capabilities of our robot dog. Some of the tasks include:

- Investigate different use cases with the existing ports on the robot,
- Integrate the robot using our Nova Node product with a 5G network
- Programming of the robot to execute autonomous missions
  - Example; when the alarm goes off, can the robot automatically look for the breach?
- Be able to control the camera, speakers, sensors of our robot remotely by using the zbos platform.
- Can the robot be controlled using hand gestures, by implementing Leap Motion?
- Can we add AI models on top of the camera feeds?

### 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 is readily available to offer assistance. Joining us means being part of a vibrant and youthful team, working in a cutting-edge technological environment.

### Student profile

- Any student studying within the field of computer science, electronics, engineering, ...
- High interest in IoT and electronics
- Programming knowledge is required
- Basic computer networking knowledge is also required
- Any student that is eager to learn about 5G is welcome, however having knowledge of 4G/5G/Lora/Sigfox/... technologies is a plus!

### Interested?

Contact Jens Buysse ([jens.buysse@citymesh.com](mailto:jens.buysse@citymesh.com)) with your CV. We have other internships available as well! Don't hesitate to contact us.