Internship 2025 Dynamic AR/VR space on 5G

Exploring AR/VR applications and use cases over 5G

Born and raised in B2B connectivity, we combine innovation, expertise, and incredible talent into (mobile) connectivity solutions that will grow both businesses and society. OG 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

5G is the newest generation of mobile networks. With it, come many new possibilities such as lower latency and higher bandwidth. During this internship you will combine private 5G networks with AR/VR applications. You'll come across challenges and limitations of these technologies while working towards the end product. There has been lots of talk about the possibilities of combining AR/VR and 5G, but little (successful) real-world implementations. This is where you come in.

The goal: Research and Innovation

You will be tasked with creating a dynamic virtual reality space that can be used in multiple scenarios. Imagine a virtual classroom, taking part in a training, following along from the Point Of View of a professional, or just using it as a virtual space to have meetings. 5G connectivity will allow real time communication between multiple users in the same (virtual) space.

AR/VR applications have always been marketed as one of the most promising implementations of 5G, but real world applications are far and few in between. Conducting research while developing this application will allow you to gain insight in the technologies, while being free to use technologies you best see fit for the job.

Expected Results:

- Gather relevant scenarios and use cases in the form of market research
- Develop a AR/VR application that works on Quest/Android/WebXR
- Showcase the possibilities over 5G for these applications
- Find out what the limitations are of these technologies

Our approach

We strive to provide comprehensive coaching and furnish students with supplementary resources and training as required. Our interns benefit from the support of a dedicated mentor who can 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:

- Undergraduate or graduate student pursuing a degree in Computer Science, Network Engineering, Digital Arts and Entertainment or a related field.
- Strong academic record with coursework in (game) development, some networking, and programming.

Technical Skills:

- Proficiency in programming languages such as Java, Kotlin, C# and Web technologies.
- Familiarity with networking concepts, including TCP/IP, routing, and wireless protocols.
- Knowledge of 5G or mobile networks (preferred but optional).
- Familiarity with Unreal Engine, Unity or WebXR (preferred but optional)

Skills and Qualities:

- Strong problem-solving and analytical skills.
- Attention to detail and a systematic approach to tasks.
- Ability to work independently as well as part of a team.
- Good communication skills to convey technical concepts effectively.
- Eagerness to learn and adapt to new technologies and challenges.

Interested?

Contact Jens Buysse (<u>iens.buysse@citymesh.com</u> and <u>celine.vileyn@citymesh.com</u>) with your CV. We have other internships available as well! Don't hesitate to contact us.

