

Design of robust, modular, compact sensor housings

Description

Televic Rail builds sensor networks on train bogies to monitor vibration, temperature etc. at different locations on the bogie. However, the sensor and its electronics need to be embedded in a housing that is: easy to install and remove, small and robust against the harsh environment of train rides.

This internship will build a 3D housing for the next generation of our sensors and their electronics. The student will need to design a CAD model of the housing which keeps track of all the challenging requirements posed upon our sensor housings. The housing needs to be easily attachable and removable to/from the train bogie. It needs to allow different orientations of the sensors. It needs to be as compact as possible. And finally, it needs to be able to withstand the temperature and water ingress profiles seen in trains.

If you are interested in this topic, please also register this on the Televic website at:

<https://www.televic.com/en/careers/internships-and-students> so we can confirm the topic is still available.

Televic Company/Department:

Televic develops, manufactures and installs top end high-tech communication systems for specific niche markets. A financially independent and stable group, Televic is divided into divisions that each focus on their specific market:

- [Televic Rail](#): passenger information systems and on-board control systems for trains
- [Televic Healthcare](#): communication systems for healthcare
- [Televic Conference](#): conference systems for large venues
- [Televic Education](#): multimedia and e-learning solutions for staff training and educational institutions

Televic creates added value for its customers by developing custom-made solutions and by continuously innovating at the cutting edge of technology.

With headquarters in Belgium and offices and plants across Europe, Asia and the US, Televic employs nearly 700 people worldwide.

About Televic Rail

With over 30 years of experience in designing, manufacturing and maintaining on-board communication and control systems, Televic Rail is a leading, trusted partner for railway operators and train builders worldwide.

Its Passenger Information Systems and Control Systems are high quality, tailor-made solutions that offer the flexibility, user-friendliness and stability that our clients ask for. Our various types of on-board control systems such as our bogie monitoring systems are innovative yet reliable products which are designed specifically for the railway business.

Trains and trams all around the world are equipped with Televic Rail solutions, from New Zealand to Canada, from China to the United States, from India to Belgium, England and France.

Contact

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<https://www.televic.com/en/careers/internships-and-students>

Nature of the work					
Level	Specialty	Type of work.	Location	Type of activities	Num of students
Academic Master	Mechanical / Product design	Research: 10% Implem.: 80% Experim.: 10%	Televic	Design	1 or 2