

## Research & development internship

### About Villari

Villari delivers a revolutionary service with the continuous monitoring of damage accumulation in steel assets using advanced wireless sensor nodes. These [RedFox](#) sensor nodes produce detailed data based on physical properties of steel, which are subsequently translated using algorithms, to structural damage parameters such as crack length. This information is then periodically reported to our clients. Villari provides this service to industries such as public infrastructure, heavy lifting, and offshore. With permanent monitoring, asset owners can benefit greatly by reducing labour-intensive manual inspections, reducing asset downtime and accurately predicting when maintenance should be executed. Please refer to <https://villari.nl> for more information.



### The assignment

You will assist us in validating our first series of sensor prototypes. Under our supervision you will be responsible for performing laboratory experiments with various test specimens in order to determine the magnitude of magnetic field variations due to damage. This valuable information will help us in determining the accuracy and applicability of our product.

### Your activities

- Learning about ferromagnetic fields around static steel objects;
- Performing laboratory experiments;
- Measuring magnetic fields;
- Logging & analysing test results

### You

- Have some experience with Python / MATLAB or similar;
- Enjoy a technical challenge;
- Do not necessarily have a prerequisite understanding of ferromagnetism;
- Are available for a minimum of three months.
- Are excited to join a young, rapidly expanding team!

### Applications

Please apply by sending your resume and a short motivation to [mail@villari.nl](mailto:mail@villari.nl)