

Graduation Assignment: Digital Twin



Royal HaskoningDHV

Royal HaskoningDHV has been making a world of difference in people's lives since 1881. As an independent international engineering and project management consultancy firm, we have been working with clients to successfully deliver projects which contribute to improving living circumstances around the world for 135 years. Our more than 6,000 colleagues, spread over 150 countries are committed to our promise to enhance society together. We combine global expertise with local knowledge to deliver a multidisciplinary range of consultancy services for the entire living environment.

The assignment

A digital twin is a digital replica of physical assets, processes or systems. Due to recent developments in for example the Internet of Things, Digital Twins are becoming more affordable. In manufacturing, this opens up opportunities in advanced ways of product and asset management and maintenance. Think, for example, of predictive maintenance planning.

The advisory group Resources Logistics and Power is a project management and design group for heavy industry and terminals. As such, we often come across existing and already functioning plants in heavy industry. Our proposed research question is how to implement Digital Twin, focussing on these existing working systems in heavy industry?

The challenges in this assignment are expected to be both in technical and political. Technical in a sense that the right sensors and systems have to be designed and chosen. Political in a sense that the benefits for heavy industry have to be found and implementation has to be deemed feasible.

The assignment will last 6-8 months and will be further detailed in collaboration with the student.

Contact

If you're interested, please contact:

- Sander van den Brand: sander.van.den.brand@rhdhv.com
- Johan Pruisken: johan.pruisken@rhdhv.com