

DO YOU WANT TO JOIN OUR DATA SCIENCE TEAM AS A GRADUATE INTERN?

Find the right research for you and apply now!



What are our typical projects?

Boskalis is responsible for a wide range of projects with various contract forms, scopes, and requirements, making comparisons challenging. To address this variability, we aim to use AI-supported analyses and predictions. Your internship will focus on exploring how we can effectively group our projects to enable these analyses. Specifically, your research will concentrate on developing a grouping model that facilitates comparative and predictive analyses.



GEO AI

Boskalis possesses data, software, and (basic) models capable of recognizing various elements in images, such as plants, objects, birds, and cracks in pavement. However, we lack the time and expertise to further explore these capabilities and discover the added value of detecting changes over time. Recently, with the assistance of an external agency, we trained a model to predict the presence of Japanese knotweed and giant hogweed in aerial photos. We now aim to implement this model on our own infrastructure and expand it to include other species and exotics. Your research will investigate the potential and benefits of this implementation, enabling us to act faster and more efficiently than currently possible.



Optimization of commuting for a project organization

Boskalis Nederland, a leading contractor in public spaces, considers its people its greatest asset. We strive for a perfect work-life balance by optimally allocating employees across projects. How do we do this intelligently? Factors like travel distance, delays, project type, and seniority come into play. In your research, you delve into the world of AI to develop a model aiding HR and pool management in this challenge. Your work contributes to sustainable employability and maximizing our employees' capacity. Moreover, you give us a competitive edge by integrating AI technologies into our processes. Will you be the driving force behind our innovative future?



Standard project composition based on actual hours worked

Boskalis Nederland undertakes various projects in public spaces, where our employees play an essential role. Achieving a healthy work-life balance and efficient operations requires understanding the relationship between capacity and workload. How do we approach this and how many employees are typically involved in projects? Your research will explore AI capabilities to develop a model supporting our management. This will enable us to quickly assess the impact of projects on our employees.



AI for contract management

Boskalis aims to explore how AI can enhance the role of contract managers in large-scale infrastructure projects like the Fehmarnbelt tunnel and New Manila International Airport. Your research will involve analyzing contract data, addenda, and correspondence between clients and contractors. Additionally, you will develop an AI solution to cluster documents and link them to construction elements. The study will assess the potential of large language models, investigate AI accuracy and test AI feasibility for contract management. Collaboration with experienced contract managers will provide valuable insights and support throughout the process.



Project control through simulation, optimization, and mitigation

Project control through simulation, optimization, and mitigation is crucial in the construction sector. Acting flexibly and swiftly helps maintain control over budget, time and emissions despite unpredictable factors. With increasing complexity and stakeholders, creative solutions are essential. Boskalis employs algorithms, simulations, and AI to quantify the impact of delays and support decision-making. Their advanced software is utilized in planning and executing offshore wind farms and infrastructure projects such as ports and land reclamation.



Digital twin development for project control

Are you involved in developing digital twins for project control, akin to Formula 1 racing? Our land and water projects continuously generate data. Success hinges on swiftly converting this data into actionable insights. The challenge lies in diverse systems and data sources. Explore how standardization can resolve this, enhance network communication, simulate scenarios, and determine the most suitable technology. This assists project managers and operational teams in making rapid, informed decisions.



Calculation model

Boskalis Nederland aims for cost efficiency and predictability in projects. We aim to predict the costs of (parts of) a project based on knowledge and data, without human intervention. This model provides estimators valuable insights from benchmarks and component prices. The goal is to connect asset structures with post-calculation data, enabling quicker and more efficient project pricing. Your research assists us in gaining control over costs.



Planning model

Starting each project from scratch consumes time and often leads to errors. We seek a graduate intern to develop an intelligent model that efficiently plans projects based on characteristics and data from previous endeavors. Your model will enhance the speed and precision of our scheduling, saving valuable time and bolstering our position as a leader in AI technology. Join our team and aid us in achieving projects faster and more effectively!