Workplace: Denmark, Billund; Job category: Engineer

Do you have a heart for LEGO and an eye for vision technology? Then join our Innovation organization to take part of the fourth industrial revolution!

For this open position we provide you the opportunity to work with state of the art vision-based technologies to lift our production into the new area of the Smart Factory or Industry 4.0. The internship will focus on how we can use vision-based technology in our manufacturing environment to assist operators and quality inspectors in production. The innovation organization for manufacturing is an international environment with dedicated specialist in different areas, your role will be to leverage our competences in computer vision. For the project you will collaborate with internal and external partners that will support you in succeeding. The external partners may be vision suppliers, but also university parties such as through the Manufacturing Academy of Denmark (MADE).

Develop and mature

The core activity for you will be to develop and make analysis of how our moulded LEGO bricks are performing visually, but you may also become involved in other vision-based activities. As part of this you will write programs for image analysis, that supports a state of the art commercial vision system for batch inspection. The physical hardware is provided by an external partner and your role will be focused on data acquisition, image analysis for report generation.

Your work will include:

Take part in the overall project which you will be associated with. Develop a framework for analysis of the visual quality of the inspected bricks. For this, you will be creating analysis methods based on frameworks as OpenCV. With this you will demonstrate:

a. What a pipeline for image comparison would be constructed by, for reference comparison.
b. What image processing could be used for highlighting detects.
c. Exemplifying which defect that could be detected from our examples of production flaws.
d. Potentially application of neural network solutions for defect detection.

To succeed in this role, it is important that you have the courage to engage in a deep technical project as handling a platform like OpenCV and potentially editing webpages. A large part of your communication will be in English mainly verbally as you will take part in an international project group as well as the daily office work that has a spectrum of nationalities. You will also make documentation of your work in English, so a good technical English is important, for this reason it is also important that you are punctual and highly organized.

Bringing it to life

“This is an exciting position where you will be able be part of demonstrating the strong capabilities which LEGO can benefit from with the massive development with machine vision. I am looking forward to seeing this field develop with your progress” says Innovation Manager Specialist Otto Abildgaard.

Professional skills

You have a background within an academic field such as Computer Science, Applied mathematics or Physics. 2 Years of experience using programming during your education for data analysis and potentially writing programs or scripts in Python, MATLAB, C# or similar frameworks. Ideally you have taken courses within image analysis or computer graphics.

If you would like to know more about the position, please call Innovation Manager Specialist, Otto Abildgaard on +45 52188178. This position was posted 05-11-2019 and may be online up to 10 weeks following this date. We do not have application deadlines on any of our positions. We take candidates into the recruitment process continuously and close the position down once we have found the right candidate. We look very much forward to reading your application – please send your application directly to otto.abildgaard@lego.com with the title “Internship application #Name”, and please remember to attach your application and a current CV.