CONFIDENTIAL

Vision integration of 3D fruit and vegetable scanner with reinforcement model

Viroteq is a young knowledge intensive company originated and located in Amsterdam. We develop, build, test and support easily accessible software for robotic packing and stacking within the logistic industry. Our goal is to enable industrial robots to replicate the human flexibility in packing and stacking tasks in processes that change constantly. To reach this goal we deliver the advanced vision, artificial intelligence and control algorithms needed to make these solutions really intelligent. For one of our sub-developments we have an internship position open and need you to help us!

To feed our intelligent algorithms with useful data, we need large amounts of stackable products. To cope with the large varieties in fruit and vegetables, we need to find out how we can convert 3D vision information of these products to high-quality lowkey input information to use as input in the stacking algorithms and training data. In this internship you will research how we can reliably acquire this information with 3D vision techniques, convert it to useful information for the training of our stacking algorithm and test this method.

Job description
- ✓ Perform research on methods for adding low-key data to existing reinforcement learning networks.
- ✓ Develop a method to convert 3D vision data to low-key data to use as stack-algorithm input.
- ✓ Develop the training model and build a test environment for this.
- ✓ Combine and implement your model within the main software and perform tests.
- ✓ Optimize the performance based on test results.

What are we looking for?
- ✓ You are currently doing a Bachelor or Master in engineering, computers sciences or equivalent experience.
- ✓ You have experience in developing machine vision applications/setups
- ✓ You have experience with one or more AI/vision libraries (e.g. Keras, PyTorch, OpenCV, Halcon).
- ✓ You are not afraid to dive into research literature.
- ✓ You are available for 4+ months.
- ✓ Experience with software development (C#.NET, C++, Python) is a big plus.
- ✓ Fluency in English, Dutch is a plus.

What we offer you
- ✓ A place within a young enthusiastic team of technical experts.
- ✓ Practical experience of intelligent robot applications in the industry.
- ✓ €250/month full-time internship
- ✓ Travel cost allowance during your internship.
- ✓ A possibility for a permanent job after you finished.

We are looking forward to receive your CV together with a short motivation at info@viroteq.com. If you have any other questions or remarks, feel free to get in contact with us and we will get in touch with you as soon as possible.