

Deep reinforcement learning for packing fruits and vegetables

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!

In order to make our packing algorithm suitable to cope with the large product varieties in fruits and vegetables, we need to find out how some of the latest deep reinforcement learning techniques could benefit the performance of the packing algorithm. In this internship you will research and design such a neural network which will be able to simulate the packing of fruit and vegetables based on gathered point-cloud data.

Job description

- ✓ Perform a research on deep reinforcement learning-setups and training methods and determine how they can be used.
- ✓ 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?

- ✓ MSc. level thinking with knowledge of deep learning techniques.
- ✓ You have experience with AI libraries (e.g. Keras, PyTorch, Tensorflow).
- ✓ 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.