

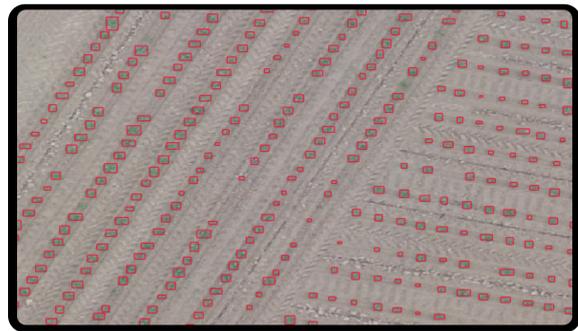
Semi-supervised learning in Agriculture

VanBoven Internship

Ever thought your knack for technology could change the way we feed the world? At VanBoven, we make agriculture more data-driven by developing predictive solutions using drone imagery and AI. We currently have an internship position open, so grab your chance and join us on our mission.

Job Description

At VanBoven we have developed proprietary Deep Learning technology to automatically analyze agricultural drone imagery. In fields with over 150k plants, our algorithms are able to identify every single one of them. We determine every plants' size, and compare it with previous recordings to establish growth patterns. When harvest time comes around we take it to the next level and determine which broccolis, lettuces and cabbages are ready to be harvested.



To train our models, we require labeled data. Labeling the data is an arduous and labour-intensive job. Therefore, we can only label a portion of our data. Is there a way to make use of the rest - the unlabeled dataset? Research shows there is: semi-supervised learning. In this internship you will research semi-supervised learning, determine how we can apply it and implement and test your algorithm.

What will you do?

- Research semi-supervised learning methods and determine how we can use them.
- Design your own semi-supervised learning algorithm for our application.
- Implement and train your model.
- Setup experiments to evaluate your work.
- Optimize your solution to finetune performance.

What do we expect from you?

- Msc. level thinking with analytical focus and hands-on mentality;
- Not afraid to dive into research literature
- Good understanding of object detection models
- Hands-on experience with implementing custom DL architectures
- Experience with classic computer vision and deep learning.
- Experience with Python and relevant libraries (e.g. OpenCV, keras, tensorflow, PyTorch)
- Available for at least 5 month;
- Fluency in English. Dutch is a bonus.

What we offer

- €300/month full-time internship reimbursement.
- Hands-on learning about Deep Learning in industry.
- Flexible work hours and location.
- Travel allowance.
- Being part of a quickly growing team and startup.

Interested? Please send your CV and a short motivation to me (kaz@vanboven-drones.nl) and I will get in touch with you as soon as possible. Any questions, remarks, tips, feel free to get in touch with me over mail.