

Data exploration for agricultural Deep Learning

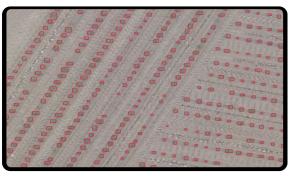
VanBoven Internship

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 Al. 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.





The input to our models are drone images, which contain a wealth of information. The internship assignment is about finding the clues hidden in this data. You will perform exploratory data analysis and data mining on our labeled dataset in order to find meaningful patterns that we can use as features for our models. You will look into methods like data augmentation, spectral characteristics, color spaces and feature extraction. As an extra you may investigate VanBoven's most recent model to determine what representation and features it triggers on.

What will you do?

- Research exploratory data analysis strategies for computer vision.
- Setup a research plan and perform your own explorative study.
- Propose a feature-set that could be used in VanBoven's detection and segmentation challenges.
- Analyze VanBoven's current model and the representation being used.
- Propose how we can include your results in our models

What do we expect from you?

- Msc. level thinking with analytical focus and hands-on mentality.
- Not afraid to dive into research literature.
- Experience with computer vision
- Understanding of statistics
- Interest in Deep Learning and data science
- Experience with Python and relevant libraries (e.g. OpenCV)
- 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 (<u>kaz@vanboven-drones.nl</u>) 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.