Deep 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 internship positions 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 are ready to be harvested.

The input for our models are high-resolution RGB images from which we extract plant traits using computer vision. As we are dealing with real world data, we face several real world issues. Varying lighting conditions, partly covered objects and high costs of labeling data are just a few. Therefore we have several (thesis) internship positions available. Areas of interest are for instance semi-supervised learning and active learning to optimize use of labeled data, as well as smart strategies to deal with varying lighting conditions in the field. Together we'll determine your exact Deep Learning topic to make sure it fits well with your wishes.

**What will you do?**

- Research solution strategies in literature.
- Setup a research plan and perform your own explorative study.
- Design and propose your method.
- 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 (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.