

Optimization of Deep Learning network

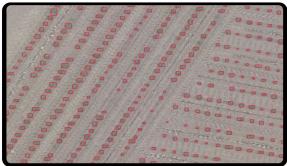
VanBoven -Internship (April - December 2020)

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.





As VanBoven's new Machine Learning Intern you will join our engineering team in further optimizing our Deep Learning implementation. More specifically you will:

- Make an assessment of our current Deep Learning model architecture and suggest improvements;
- Perform sensitivity analysis on hyper-parameters of our Neural Nets and identify the biggest contributors;
- Develop a tuner tool to find the best hyper-parameter configuration for our Neural Nets;
- Suggest and experiment with alternative network architectures to increase our computational efficiency.

What do we expect from you?

- Msc. level analytical thinking and hands-on mentality;
- Available for at least 4 month;
- Experience using Python packages for images processing and/or AI (e.g. TensorFlow, Keras, OpenCV);
- Experience applying Deep Learning concepts (e.g. YOLO, Mask R-CNN);
- Fluency in English. Dutch is a bonus.

What we offer

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

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.