Active Learning Implementation for a Deep Learning Pipeline

About Ocell

OCELL is a TUM spin-off focused on generating and interpreting extremely high-resolution aerial imagery with its own network of professional pilots and AI techniques. We're currently mostly serving forestry customers but expanding our business and services to multiple additional use-cases in urban areas. OCELL already generated and analyzed hundreds of terrabytes of data with advanced AI algorithms.

Objective

Our current machine-learning pipeline is not capable of active learning, resulting in a tedious and time-consuming labelling process. By giving the pipeline the capability of estimating the confidence of each classification, we can use highly confident predictions as future labels and let unclear samples be labelled by humans. That way the model can iteratively become better in a faster and more efficient way, while making the labelling task more interesting and less repetitive.

What we offer

• Early involvement in a startup
• Fascinating data sets and ML problems
• Self-responsible work style
• Having a say in technical decisions
• Guidance and support

What we are looking for

• Experienced interns or IDP groups of at least two members
• Motivation and technical adeptness
• Programming experience in Python
• Initiative and self-responsibility
• Understanding of data handling and machine learning
• Fascination for startups
• EI70360/EI70310/ or other relevant modules. Up for discussion.

If you’re interested, please contact us over info@ocell.io or LinkedIn