



Data Ductus is a global, full-service software engineering consultancy company. We plan, build and manage service automation and orchestration in areas where disruptive change is taking place.

We offer a dynamic and open working environment with interesting and challenging projects where you get the opportunity to expand your skill-set, explore the latest IT innovations, and work on real-life solutions that transform companies. We believe in giving our consultants the freedom and the tools they need to succeed and develop.

We welcome all nationalities, ages and backgrounds and operate from ten offices on three continents.

A great way of getting to know us is by doing your degree project with us. Have a look at what we have to offer - or talk to us about your own idea!

Quick Facts About Data Ductus



Number of employees:
250



Number of offices:
12



Year founded:
1989



Ownership:
Privately held

EMEA

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Available thesis topics

At Data Ductus we are always looking for bright minds to help us explore IT. These are the areas we would like to focus on right now. If you can help us and would like to do your thesis at one of Sweden's leading IT consultants, then get in touch. If you have amazing idea or project that's not listed, we are open to suggestion, but you need to wow our experts.

Submit your application on our website: www.dataductus.com/careers

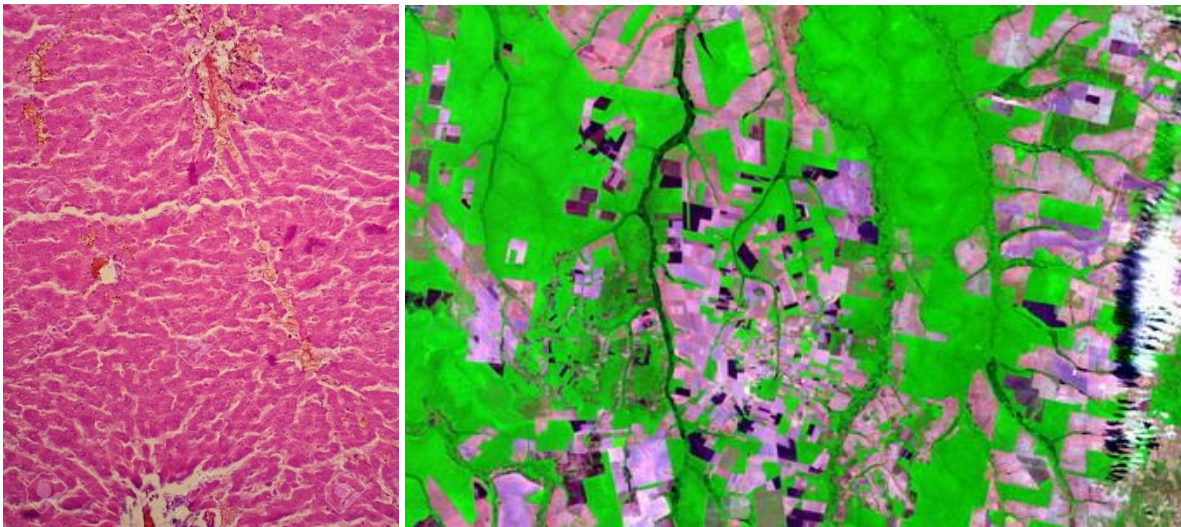
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1 MACHINE LEARNING FOR CLASSIFICATION OF IMAGES

Master thesis work – Luleå/Skellefteå

Data Ductus is involved in several complex vision projects, where we take advantage of machine and deep learning to improve product quality, production rates and perform predictive maintenance. We are working with a wide variety of images from microscope to satellites.



Implementation of algorithms will be done primarily in Python and use third party libraries such as scikit-learn TensorFlow, Keras and OpenCV.

Reference: martin.simonsson@dataductus.se

2 INVOICE ARTICLE EXTRACTION USING SAAS TOOLS

Master thesis work – Uppsala

In business process automation (BPA), enterprises are applying results from research in Artificial Intelligence (AI) to lower cost of labour-intensive tasks. An example of BPA is using AI to automate invoice handling by extracting dates, amounts, and payment information.

In the recent years, there has been a democratization of AI tools in the form of Software-as-a-Service (SaaS) tools giving developers access to state-of-the-art models over the internet. In particular, the larger cloud providers supply such services in a way that makes them very accessible for systems deployed with that provider.

One such tool is Optical Character Recognition, transforming an image containing text into a list of words and their respective location. The more sophisticated tools are starting to be able to extract keys/values from forms and tables. In general, the Swedish language is not well supported.

In this project, the student will test and evaluate the capabilities of AWS *Textract* when used to extract articles and quantities from invoices in Swedish. Questions that should be answered are, for example, generality (can it handle invoices from multiple issuers?), accuracy, severity of wrong answers, and amount of work to get a solution running.

Prerequisites:

- Ability to write code in Python, C# or JavaScript.
- Basic grasp of how to use REST APIs.

Reference: max.block@dataductus.se