WILLIAM SANDVEJ HANSEN

Data Engineer



in william-sandvej-hansen





Summary

Based on your competencies, personal traits, and experiences, you are well-equipped to contribute to the job description outlined by SimCorp. Your experience as a Data Engineer at Energinet and Ørsted has provided you with the necessary skills in T-SQL, Python, Spark, and familiarity with cloud data services such as Azure. Your background in developing data pipelines, data validation components, and data analytics tools aligns well with the responsibilities outlined for this position. Your experience in developing geodata algorithms and working with lidar data at NIRAS also demonstrates your ability to work with complex data sets and develop innovative solutions. Your problem-solving skills, proactiveness, and ability to collaborate with team members make you an ideal candidate for contributing to the data platform at SimCorp. Overall, your technical skills, experience with modern data platforms, and collaborative mindset make you well-suited to make a valuable contribution to the evolving DEP data platform and ensuring scalability for future customer needs at SimCorp.

SKILL MATRIX

name	level	last used	years of experience
python	00000	2023	5
spark	00000	2023	1
C#	00000	2018	2

LANGUAGES

Pvthon SQL **JavaScript**



PERSONALITY

Creative Motivator Eager

EDUCATION

Master of Engineering - MEng, Earth and Space Physics and Engineering **Danmarks Tekniske Universitet**

1 2014 - 2016

Bachelor of Engineering (BEng), Electrical and Electronics Engineering **Syddansk Universitet**

1 2010 - 2014

EXPERIENCE

Data Engineer

Energinet

📋 December 2022 - October 2023 🎈 Copenhagen, Capital Region of Denmark, Denmark

As a data engineer at Energinet, i was responsible for developing a data project collecting massive amounts of data from the energy island in denmark, from various providers. The main goal was to recieve, perform quality control, and deliver data to the developers wanting to bid on the project. In order to quality control and unpack these wide range of binary offshore sensor data files, we relied on spark and databricks to be able to scale, while at the same time allow for the flexibility of the various data formats. Just to name a few, GDB, DFSU, segy, xtf etc. Some of these datasets had to be unpacked for QC, analytics and visualization purposes, so in order to support geospatial data in spark i used sedona (geospark) to be able to store data in delta parquet format and to perform spatial partitioning on the dataset using geohashing, in order to improve read performance.

python databricks spark GDB **DFSU** segv xtf sedona geospark parquet geohashing

Data Engineer

Ã~rsted

As a data engineer I have been developing a data validation component as a part of our data pipelines, with configurable inputs for what to validate, developed in python, relying on pandas as data abstraction, integrated using Azure Service Bus. I have also been involved with the data modelling in order to provide easy to understand and consume data for various analytics tools. MS Sql Server, Rest api. In order to do iterate faster when implementing the right data model, we used python, sqlalchemy and Sqlite, to implement a mock db, mimicking the production environment, and to test the changes before implementing it, avoiding changes in api and data pipeline. I have also developed different data analytics and visualization tools in python using streamlit, Panel, Dash and bokeh, that helps engineers to make interpretations based on the data. At Ã~rsted i have been using the SAFE framework for project management, Devops has been relying on Azure devops, Docker and K8S. python pandas Azure Service Bus MS SQL Server REST API sqlalchemy Panel **SQLite** streamlit Dash bokeh **SAFE** Azure DevOps Docker Kubernetes IT Consultant Netcompany □ November 2018 – November 201 KÃ, benhavnsomrÃ¥det, Danmark At Netcompany i have been working at big projects building custom IT solutions with multiple integrations. The primary tools that i have been using as a backend developer was Oracle, Groovy, REST and a bit of Javascript. For project management and version control Jira and Git with SCRUM. Oracle Groovv REST JavaScript Jira Git **SCRUM** Softwareudvikler **NIRAS** At Niras i have been developing geodata algorithms for data transformation, including processing of lidar data, and images. I have among other developed an image classifier that can identify buildings in spectral orthophotos. I have also developed a model that can based on lidar and gis road data, identify the height profile of

the roadsides, and identify the need and cost for cleaning the roadside. This was developed in C# using Postgres, postgis, with parallel processing capabilities. At Niras i have also been developing various plugins for QGIS, using Qt and Python.

image processing C PostgreSQL **PostGIS** Qt python

Engineer

KK Wind Solutions

March 2014 - August 2014 Ikast

At KK wind solutions I was hired for a project of a half year where I was investigating the effort of switching out a communication chip for the IO boards in the wind turbine control system. This was due to inducing flexibility in the product configuration. This project involved programming the chip in C, investigating communication protocols as Ethercat profinet etc.

EtherCAT **PROFINET** C

Instructor

Det Tekniske Fakultet, Syddansk Universitet

☐ September 2013 – January 2014 Odense Area, Denmark

instructor in Electronics courses teaching basic analog circuit design.	
Internship Electronics VELUX ☐ February 2013 – June 2013 ▼ Skjern - Denmark	
During my time at Velux I developed a PCB for loading a solar panels. This PCB was meant for testing the durability of solar panels for the automated Velux windows. PCB design PROJECTS	
development-workforce	
ai-test-project	