

# Mark Lusty Jensen

231 Northrup Dr, Erie, CO, 80516 – +1 (720) 705-7529

marklustyjensen@gmail.com – www.marklustyjensen.com

## **Objective:**

Recently received authorization to work in the United States after moving here from Denmark. I am eagerly looking forward to putting my Master's in petroleum engineering to use with a job in Oil and Gas Industry and taking advantage of my skills in the Radial Jet Drilling (RJD) field. Newly acquired skills in machine learning using Python. While waiting for my work permit, I taught myself computer programming, mainly Python. But also some HTML, CSS and JavaScript, which I used to create my website. Learning computer programming has helped keep my problem-solving skills sharp and kept me busy intellectually.

## **Education:**

- Master of Petroleum Engineering from The Technical University of Denmark (DTU).  
Major: The effect of Radial Jet Drilling (RJD) as a stimulation technique in reservoirs.
- Bachelor of Civil Engineering from The Technical University of Denmark (DTU).  
Majoring in Construction Technology with a focus on 3D modeling and simulation in the construction industry.

## **Publications:**

- Salimzadeh, S., Grandahl, M., Medetbekova, M., & Nick, H. M. (2019). A novel radial jet drilling stimulation technique for enhancing heat recovery from fractured geothermal reservoirs. *Renewable Energy*.
  - o In this study, the application of the Radial Jet Drilling (RJD), a novel stimulating technique for enhancing productivity in the existing wells in deformable naturally fractures reservoirs was investigated using a robust three-dimensional finite element DFM (discrete fracture-matrix) model. Results showed that the RJD laterals were more effective in enhancing injectivity/productivity in cases with lower fracture density, i.e. lower equivalent permeability, while they had no significant effect on the heat production in these cases. In higher fracture density cases, the RJD laterals improved the heat production while had no significant effect on the injectivity/productivity. Results also showed that in reservoirs with very low permeability matrix, the RJD laterals can be used to connect the wells to the fracture network and hence enhance the well performance. The sensitivity analysis on the average net energy production rate with respect to the length of the RJD laterals showed that in the situations where the wells were not connected directly to the fractures, the length of RJD laterals played a crucial role in enhancing the average net energy rate. However, the 100 m laterals almost removed the dependency of the average net energy production rate on the well placement for low, medium and high fracture density cases.

## **Experience:**

### **Owner of AmbMar, LLC** May 2023 – Present

- Applying my native language Danish, as a software tester and linguist for the RWS Group on a case to case basis as a freelance contractor. I have currently tested for Philips, Google among others.
- Building websites for clients. All websites are build from the ground up using HTML, CSS and JavaScript. Currently building a website for a local realestate agent.

### **External consultant for Siemens** from March 2021 – June 2021

- Managed a massive backlog of 200+ fire plans for buildings operated by Siemens in Denmark, using AutoDesk software.

- Directed and trained a team of technical designers to eliminate the backlog.
- Implemented a management system with expectations to ensure there would not be a backlog.
- Reduced wait times for updated plans from 6 to 7 weeks to 2 to 3 days due to well-trained staff.

#### **External Consultant for the Region of Copenhagen from May 2019 - December 2019**

- Coordinated with a team of five technical designers to maintain and transform drawings of the whole region's hospital buildings to be up-to-date.
- Started the revamp process of approximately 20 million square feet of the 12 hospitals in the Capital Region of Denmark.
- Navigated this intense project in two aspects; Restructuring the AutoCAD 2D drawings and converting them into 3D models using AutoDesk Revit. Updating the building installation drawings into 3D models. To create up-to-date and enhanced materials for Facility Management.
- Trained and lectured other team members on the key features in AutoDesk Revit; drawing set-up templates and extracting data for facility management and future renovation projects.

#### **Technical assistant at Ramboll Denmark from 2012 - 2018**

- I was part of the engineering team on numerous big construction projects such as, Panum Institute in Copenhagen, Niels Bohr Institute in Copenhagen, Hospital in Hilleroed, Office building at Kay Fiskers Square in Copenhagen, and Novo Nordics in Kongens Lyngby, among others.
- Designed new build construction and renovation of protected buildings. This scope of work ranged from office buildings, hospitals, and research facilities at a university standard.
- Developed 3D models of building installations, simulations of building installation performance, and calculating dimensions for ducts and pipes, to insure a top-level indoor climate.

#### **Teaching Assistant at Technical University of Denmark (DTU) from 2012 - 2016**

- Mentored approximately 60 students trying to obtain their bachelors in civil engineering.
- Taught first semester students on the course engineering work.
- Delivered 2-3 lectures pertaining to basic sketching techniques, 2D drawing in AutoDesk AutoCAD and 3D modeling in AutoDesk Revit.
- Assisted the students in solving assignment. At the end of the semester I had the job of grading the student based on the portfolio of drawings and 3D models they had done throughout the semester.
- Instructed between 50 and 70 third semester students on the course Building Information Modeling (BIM).
- The class included more advanced 3D modeling including modeling of building services and simulations using software's like AutoCAD, Revit, Sigma etc. Both by holding lectures, and assisting in solving assignments.