

Mark Lusty Jensen

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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 real estate agent.

External consultant for Siemens 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 JL-Engineering January 2021 - March 2021

- I was hired to make sure a project about a new school that had fallen behind schedule was brought back on schedule. I was put in charge of implementing all the electrical components into the large 3D model using AutoDesk Revit.
- I was working along side a senior electrical engineer, and together we got the project completed on time.

Carpenter April 2020 - September 2020

- Completed the remaining jobs on the books for a medium size carpenter contractor alongside a senior carpenter in preparation for closing down the company.
- Among the remaining jobs were a complete replacement of the floor in a house after significant water damage, installing a new roof on a residential home, window replacements, installing new kitchens, and more.

External Consultant for the Region of Copenhagen 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.

Swim coach at VSK August of 2014 - May of 2017

- Swim coach for kids of the ages between seven and nine on a level right below competitive level.
- Was in charge of developing the club's strategy for recruiting more kids to the competitive division of the club. Throughout two seasons we managed to increase the number of kids starting competitive swimming in the club by 18%. This was achieved by developing a streamlined program starting when the kids were around five years old, up to the age of seven to nine when they start swimming competitively.
- As part of this work, I have had yearly first aid courses, both general first aid and specific to water rescues.

Technical assistant at Ramboll Denmark 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) 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 cause 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.

Bike mechanic January 2011 - August 2013

- I mainly worked on a mid range road and triathlon bikes. I did anything from service, getting them ready for the summer, and tune-ups before a big event to insure that the bike was in perfect condition for big event.
- I also worked on mountain bikes, mostly during the fall and winter when more people tend to gravitate in the direction of Denmark. Here I mainly did maintenance and services on both hard tails and full-suspension bikes.
- I also did some custom bike builds where a customer came in and chose all the components they wanted, and then we build the bike to those specific specs. These were usually high end road bikes and triathlon bikes.

Lifeguard May 2009 - September 2012

- As a lifeguard, I had several responsibilities. One of them of course to keep an eye on people in the pool. 20 minutes out of every hour was spent on pool duty. The rest was spent going through the locker room making sure it was always clean. The pool facility also had a gym, so time was spent there every hour as well.
- As a lifeguard, I was required to take an extensive first aid course once a year, plus passing a practical test every six months in the water simulating drowning accidents. During my three years, I never failed a first aid course or a practical test.
- As part of the gym, we lifeguards also worked as fitness instructors. I ran a spin class twice a week every other week for a year.

Swim coach at GSK September 2007 - May 2009

- I had several different teams during the week with kids ranging from 4 to 10 years old.

- With the smaller kids, the goal was to make them comfortable in the water, teaching them what to do if they were to fall into a pool somewhere. So, things like how to float, and roll over to their backs to breathe.
- The focus on the older kids shifts to be more swimming orientated. We started on stroke- specific technique, and breathing techniques. I had several kids I thought at the age of 7 to 9 years old that went on to compete at a national level later on.

Paper boy August 2006 - July 2007

- I ran with the local newspaper every Wednesday after school.
- The route I had was around 260 households.