Noah Elsayed

Mechanical & Digital Engineering Student

SUMMARY

Born in Calgary, I have always been fascinated by mechanical systems. I am in my third year of pursuing a BSc in Mechanical Engineering with a minor in Digital Engineering. As an active drivetrain member of UCalgary Racing, I am able to gain hands-on mechanical, automotive, and manufacturing engineering experience. My work has primarily related to data exploration and machine learning, and I look forward to applying machine learning to mechanical engineering applications. When I'm not thinking about engineering, I'm probably thinking about cars or sports instead.

⚲ : **Calgary, Alberta, Canada**

⌂ : **https://www.noahkae.com**

○ : **noahkae** (https://github.com/noahkae)

in : **Noah Elsayed**
   (https://www.linkedin.com/in/noahka-elsayed/)

Experience 💼

May 2024 – Aug 2024

Production Engineering Summer Student at Whitecap Resources Ltd. (https://www.wcap.ca/)

SUMMARY

As part of Whitecap's 2024 summer student program, I worked with the Weyburn, Saskatchewan production team. I had the privilege of getting hands-on experience in the field, and was able to improve my communication, teamwork, and machine learning skills.

- Consolidated large quantities of scattered MMV data to create a Tableau dashboard
- Trained a LSTM Neural Network and used in a GUI tool to predict well flow rates while drilling
- Delivered an extensive "Introduction to Machine Learning" course to the Weyburn engineers
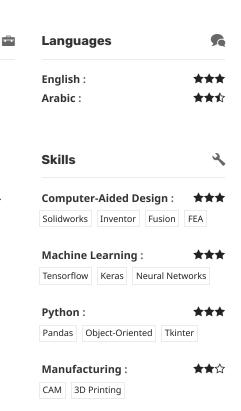- Represented "Whitecap Resources Ltd." at the 2024 Saskatchewan Oil & Gas Show

May 2024 – Sep 2024

Engineering Summer Student at BRE Group (https://bre-group.ca/)

SUMMARY

Working as an intern at BRE Group in 2023 under Richard Baker, I was able to get a basic understanding of reservoir engineering and improve my understanding of the oil and gas industry.

- Spearheaded a complete website overhaul, modernizing online presence
- Developed critical components of intensive CCS and CCUS courses, devising innovative problems
- Created and digitized intricate figures, enhancing data visualization and communication efficacy
- Co-authored an article on reservoir simulation model complexity

Languages 💬

English : ★★★
Arabic : ★★⯪

Skills 🔧

Computer-Aided Design : ★★★

| Solidworks | Inventor | Fusion | FEA |

Machine Learning : ★★★

| Tensorflow | Keras | Neural Networks |

Python : ★★★

| Pandas | Object-Oriented | Tkinter |

Manufacturing : ★★☆

| CAM | 3D Printing |

Extracurricular 🌐

Oct 2023 – *present*
Drivetrain Subteam Member at UCalgary Racing (https://ucalgaryracing.ca/)

SUMMARY

Helped develop and build the University of Calgary's Formula SAE car, the UCR-01.

- Placed and designed the mounts for the motor controller and high-voltage disconnector
- Ran critical safety FEA on drivetrain components
- Developed exceptional Solidworks and PDM skills
- Attended FSAE EV Michigan 2024 to compete the UCR-01

Education 🏛️

Sep 2022 – *present*
Bachelor of Science in Mechanical Engineering from The University of Calgary

- ENME 341 - Fluid Mechanics
- ENGG 311 - Thermodynamics
- ENDG 319 - Statistics and Machine Learning
- ENDG 311 - Advanced Software Design and Development

Publications 📖

Aug 2023
Simulation Model Complexity and the Realities of Data Implementation
(https://www.linkedin.com/pulse/addressing-simulation-model-complexity-realities-data-richard-baker/?trackingId=RKucC4YsQb66BEwpnuViBA%3D%3D)

SUMMARY

Simulation models are often constructed when evaluating Carbon Capture and Storage (CCS) projects. Both plume migration and injectivity are sensitive to permeability heterogeneity and faults/fractures. Initially, these models depend upon geologic concepts and a limited number of wells and are therefore lacking the required data complexity needed to populate a simulation model.

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I have no doubt in my mind that Noah Elsayed is destined for success in any field he chooses to pursue, whether it be engineering, business, research, or beyond. I am confident that he will bring an exceptional level of dedication, intelligence, and pragmatism to any endeavor he undertakes.

— *Richard Baker*

Interests 🖤

Cars :

Formula 1   WRC   Vehicle dynamics

Sports :

Soccer   Boxing   MMA

Technology :

FOSS   Self-hosting   Linux

Other :

Gardening   Watches   Investing

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