

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**

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🏠 : <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 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 coworkers
- 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 disconnecter
- 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. 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.

Reference



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

: