Noah Elsayed

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Work Experience

Production Engineering Intern, Whitecap Resources Ltd. – Calgary AB May 2024 - Aug 2024

- Developed and packaged an LSTM neural network into a GUI to help size artificial lift in wells
- Consolidated and visualized terabytes of MMV data using Tableau to streamline data monitoring
- Assisted in field operations and diagnosed pump failure mechanisms, leading ESP teardowns
- Represented Whitecap at the 2024 Saskatchewan Oil & Gas show to communicate the economic potential of machine learning in Canada's energy sector

Engineering Summer Student, BRE Group – Calgary, AB May 2023 - Aug 2023

- Spearheaded a complete website redesign, modernizing online presence
- Created crucial aspects of an industry-leading CCS course, establishing creative problems
- Co-authored and published an article regarding the ideal complexity and common pitfalls of reservoir simulation models

Education

University of Calgary, BSc in Mechanical and Digital Engineering Sept 2022 – April 2027

- GPA: 3.5/4.0
- Coursework: Fluid Mechanics, Fundamentals of Applied AI, Dynamics, Thermodynamics

Extracurricular Experience

Drivetrain Subteam Member, UCalgary Racing FSAE Sept 2023 - Present

- Led vehicle motor controller mounting, lowering vehicle CG and using Solidworks FEA to ensure safety
- Attended the 2024 FSAE competition to assist in competing the teams first EV
- Leading the development of the 2025 car's traction control and cooling systems, while gaining data to verify future drivetrain-related decisions

Projects

Rotary Engine Generator

- Directed a team of 4 engineers in successfully creating an innovative generator design
- Decreased engine weight when compared with a similar piston engine by 56%
- Optimized engine efficiency to nearly double that of a comparable Wankel design
- Tools Used: Solidworks, MATLAB

Racing Driver Reaction Time Tester

- Created a handheld driver reaction time tester powered by an Arduino Uno
- Designed and 3D printed a formula-style steering wheel to house the system and increase useability
- Interpreted gyroscope inputs to determine user accuracy and reaction time
- Tools Used: Fusion, PrusaSlicer, C++

Skills & Technologies

Programming: C++, Python, SQL, HTML, Git, MATLAB

Technologies: Machine learning (Keras, Tensorflow), Tableau, Solidworks, Inventor, Revit, Fusion, Linux, and Photoshop, Resolve, Premiere Pro