

Diann Macris

Mechanical Engineer

Profile

Detail-oriented Mechanical Engineer with 1 year of experience in designing, developing, and optimizing mechanical systems. Proficient in CAD software, FEA analysis, and project management. Demonstrated ability to collaborate effectively in cross-functional teams, meet deadlines, and deliver innovative solutions. Seeking opportunities to leverage engineering expertise and contribute to the success of complex projects.

Employment History

Mechanical Engineer at Northwest Contracting Inc., ND

Apr 2023 - Present

- Successfully designed and implemented a heating, ventilation, and air conditioning (HVAC) system for a 50,000 sq. ft. commercial building, resulting in a 20% reduction in energy consumption and \$50,000 annual savings for the client.
- Completed a comprehensive stress analysis on a critical pipeline system, identifying and resolving potential failure points and extending the system's lifespan by 15 years, saving the company \$2 million in potential repair costs.
- Led a team of engineers to optimize the efficiency of a manufacturing production line, increasing overall productivity by 25% and reducing downtime by 40%, contributing to an annual revenue increase of \$1.5 million for the company.

Associate Mechanical Engineer at DGC - Dakota Gasification Company, ND

Aug 2022 - Feb 2023

- Successfully designed and implemented a new heat exchanger system for the plant, resulting in a 15% increase in energy efficiency and saving the company \$500,000 in annual energy costs.
- Led a team of engineers in the development and installation of a new gas compression system, improving the overall performance by 25% and reducing maintenance costs by 20%.
- Conducted a thorough analysis of plant operations, identifying inefficiencies and recommending improvements that led to a 10% reduction in downtime and an annual savings of \$300,000 in maintenance expenses.
- Played a key role in the successful completion of a \$2 million plant expansion project, ensuring all mechanical systems were designed and installed according to specifications and within budget constraints.

Education

Bachelor of Science in Mechanical Engineering at North Dakota State University, Fargo, ND

Aug 2018 - May 2022

Relevant Coursework: Fluid Mechanics, Thermodynamics, Heat Transfer, Statics and Dynamics, Mechanics of Materials, Machine Design, Manufacturing Processes, Control Systems, Material Science, and Engineering Mathematics.

Details

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Links

[linkedin.com/in/diannmacris](https://www.linkedin.com/in/diannmacris)

Skills

AutoCAD

SolidWorks

Finite Element Analysis

MATLAB

Computational Fluid Dynamics

LabVIEW

Pro/ENGINEER

Languages

English

Mandarin

Hobbies

Building and tinkering with robots or machines

Participating in automotive restoration or modification projects

Engaging in 3D printing and design projects