Ryan Gallagher

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# Summary

Experienced Mechanical Engineer with a strong background in the design and optimization of autonomous auxiliary systems and engine systems for naval vessels. Currently pursuing a Master's degree in Computer Science with a focus on Artificial Intelligence and Machine Learning. Proficient in technical support, project engineering, and digital modeling, seeking to leverage my technical skills and engineering experience in a Structural Engineer / Project Engineer role at Leidos.

# Technical Skills

\*\*Languages\*\*: C, Java, Python
\*\*Libraries\*\*: NumPy, PyTorch, Pandas, Scikit-Learn
\*\*Version Control\*\*: Git, GitHub
\*\*Modeling & Simulation\*\*: PIPE-FLO, MATLAB
\*\*Computer-Aided Design\*\*: AutoCAD, SolidWorks

# Professional Experience

**Mechanical Engineer - Leidos, Philadelphia, PA**  
May 2020 - Present

* • Provided technical and programmatic engineering support to the Naval Surface Warfare Center.
* • Developed digital models of auxiliary systems for performance optimization and improvements.
* • Designed engine systems and autonomous auxiliary systems for U.S. Navy and DARPA vessels.
* • Developed software solutions, including neural networks and reinforcement learning models, to enhance ship design processes.

**Mechanical Engineering Intern - Monroe Energy, LLC, Trainer, PA**  
May - August, 2016 - 2019

* • Assisted in engineering projects, contributing to data analysis and project reporting.
* • Harmonized engineering practices in compliance with standards and codes.

# Education

**Master of Science, Computer Science**  
Drexel University, Philadelphia, PA  
Graduation Date: 2021 - Present (Expected Graduation: Spring 2025)  
GPA: 3.93  
Current focus: Artificial Intelligence and Machine Learning

**Bachelor of Science, Mechanical Engineering**  
Thomas Jefferson University, Philadelphia, PA  
Graduation Date: 2018 - 2020  
GPA: 3.39

**Bachelor of Science, Physics (Minor in Mathematics)**  
West Chester University of Pennsylvania, West Chester, PA  
Graduation Date: 2015 - 2018  
GPA: 3.11

# Projects and Achievements

Autonomous Engine Systems Design: Led the design of comprehensive autonomous systems for naval vessels, improving operational efficiency and reliability.
Software Development for Ship Design: Developed a neural network to predict flow rates and a reinforcement learning model to optimize ship equipment arrangements.
Data-Driven Optimization: Conducted performance analysis on LPD 17 class ships, demonstrating a significant reduction in engine operating time through specific modifications.

# Additional Information

Availability: Willing to relocate to Fort Worth, TX and travel 25% of the time.
Security Clearance: [If applicable, mention current security clearance status].

I'm enthusiastic about the opportunity to bring my engineering expertise and passion for innovation to the Structural Engineer / Project Engineer position at Leidos. Thank you for considering my application.

Sincerely,

Ryan Gallagher