

785-721-7207

raymond-siefert@email.com

Seattle, WA

EDUCATION

Doctor of Philosophy (Ph.D.) in Aerospace Engineering

California Institute of Technology (Caltech)

Graduated: 2014

Master of Science in Aerospace Engineering

Georgia Institute of Technology

Graduated: 2009

Bachelor of Science in Mechanical Engineering

University of Michigan

Graduated: 2007

Selected Publications

- "Enhancements in Composite Materials for Modern Aircraft", Journal of Aerospace Engineering, 2023.
- "Optimization of Aerodynamic Performance Using Advanced CFD Techniques", Aerospace Science and Technology, 2022.
- "Innovative Propulsion Technologies for Future Commercial Aircraft", International Journal of Aerospace Innovations, 2021.

SKILLS

- Technical Skills:** Aerodynamics, propulsion systems, materials science, structural optimization, computational fluid dynamics (CFD), finite element analysis (FEA), CAD software (CATIA, Siemens NX).
- Programming Languages:** MATLAB, Python, Fortran, C++.
- Project Management:** Cross-functional team leadership, project planning, milestone tracking, risk management.

LANGUAGES

- English: Native
- French: Intermediate

RAYMOND SIEFERT

BOEING RESEARCH AND DEVELOPMENT ENGINEER

PROFESSIONAL SUMMARY

Accomplished Research and Development Engineer with a Ph.D. in Aerospace Engineering and experience specializing in advanced aircraft systems and materials science at Boeing. Expert in aerodynamics, propulsion systems, and structural optimization, with a strong track record of leading high-impact projects and driving innovation in aerospace technology.

EXPERIENCE

- 2018 - Now

Lead R & D Engineer

Boeing / Seattle, WA

- Direct the development and optimization of advanced composite materials for the Boeing 787 Dreamliner, resulting in a 15% reduction in aircraft weight.
- Lead a multidisciplinary team in the design and testing of an innovative propulsion system for future commercial aircraft, improving the thrust-to-weight ratio by 20%.
- Conduct cutting-edge research in aerodynamics and fluid dynamics to enhance aircraft performance, leading to the successful implementation of new wing designs that increased lift-to-drag ratio by 12%.

- 2014 - 2018

Senior Aerospace Engineer

NASA Langley Research Center / Hampton, VA

- Developed and tested new aircraft wing configurations and materials for NASA's advanced air mobility programs, resulting in significant improvements in efficiency and performance.
- Utilized computational fluid dynamics (CFD) to model and analyze aerodynamic properties, aiding in the design of high-speed experimental aircraft.

- 2009 - 2014

Aerospace Engineer

Lockheed Martin / Palmdale, CA

- Assisted in the design and development of the F-35 Lightning II, focusing on structural integrity and materials selection, contributing to enhanced stealth capabilities and durability.
- Performed finite element analysis (FEA) on critical aircraft components to ensure compliance with safety and performance standards, leading to a 10% reduction in structural weight.