PIOTR MOCZYBRODA

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n Delft, Netherlands



OBJECTIVE

Ambitious and dynamic engineer with extensive teamwork experience on complex engineering projects. With a solid foundation in fluid dynamics, mechanical, and structural engineering, I am driven by curiosity and passion to apply my skills in a professional engineering setting. I excel in environments that require adaptability, teamwork, and meticulous attention to detail.

EXPERIENCE

TWD

Aug 2025 - Present

Engineer

I design custom mechanical and structural installation tools for offshore construction projects. My responsibilities include developing design concepts, performing calculations in Python, and conducting FEM analyses for verification.

EDUCATION

Delft University of Technology, Netherlands Sep 2022 - Jun 2025

Technical University of Valencia, Spain Sep 2024 - Jan 2025

Bachelor's Degree in Aerospace Engineering

Specializing in aerodynamics and mechanics, combining engineering knowledge with experience in CAD design and Python programming.

Minor Exchange Programme

Gained insights into design engineering, industrial engineering and economics to obtain interdisciplinary knowledge and perspectives.

OTHER EXPERIENCE

Elab Education Oct 2023 - Jun 2025

Lambach Aircraft Sep 2023 - Jun 2024

Mentor/Tutor

I assist students in the university recruitment process, helping them prepare for entrance exams in mathematics, physics and first-year engineering subjects, while offering personalized advice on choosing the right degree.

Aerodynamics Engineer

Focused on aerodynamics optimization using CFD Ansys Fluent and supported the manufacturing process of an aircraft for the British Model Flying Association competition as part of the TU Delft Student Team.

PROJECTS

TU Delft

Feb 2025 - Present

TU Delft

Feb 2024 - Jun 2024

TU Delft

Sep 2023 - Jan 2024

TU Delft

Nov 2023 - Dec 2023

Project Management Principles Google

CERTIFICATIONS

Google

SKILLS

- Structural Engineering
- Python Programming Language
- RFEM Software
- CAD Software (CATIA and Solidworks)
- MS Office
- Effective Teamwork as an Implementer Role
- Matlab
- CFD Ansys Software

LANGUAGES

Polish Native Proficiency

English Full Professional Proficiency

Spanish Intermediate Proficiency

INTERESTS

- Tennis and Skiing
- Stock Market
- Chess
- Formula 1

Simulation, Verification and Validation

Developed numerical simulation models to analyze the performance of aerospace systems. Conducted verification and validation to ensure accuracy in representing real-world phenomena, supported by theoretical analysis and hypothesis testing.

Research paper on Trend Analysis in the European Aviation Sector

Our team analyzed EUROCONTROL flight data and developed AI-based predictive models for upcoming years under various scenarios. This work provided key insights into national emission trends and recommendations for sustainable aviation policy.

Aircraft Wing Design for Small Passanger Aircraft

Executed aircraft wing design project, covering initial sizing, airfoil selection and comprehensive control surface design, followed by primary component integration. Developed a wing box structure with detailed load-case and failure analyses, integrating aerodynamic efficiency with safety requirements

Wind Tunel Experiment

Aerodynamic analysis of 2D and 3D wing models using wind tunnel experiments and computational simulations to assess lift, drag and stall effects. Identification of discrepancies between simulation and experimental results.

Project Management Principles certificate in Team Building, Project Structure and Resources Management

Certificate in Online Marketing Tools and Data Analysis