BEN FRIEDEL

Hamburg, Germany | benfriedel.net

PROFESSIONAL SUMMARY

I’m an Aeronautical Engineering student at HAW Hamburg and Airbus, working across aircraft design, simulation and manufacturing. Beyond that, I build projects and prototypes to explore new tools and ideas.

WORK EXPERIENCE

Mechanical Engineering Intern

Zoo | Remote | Aug 2026 - Present

- Developed original CAD models and evaluated Zoo Design Studio for practical engineering applications.
- Contributed to product development through technical feedback and manufacturing-focused validation projects.

Dual Student

Airbus | Hamburg, Germany | Aug 2023 - Present

- Combined university studies with full-time placements across different Airbus engineering departments.
- Performed virtual testing of aircraft components using CATIA and Abaqus, including finite element modeling, analysis and post-processing.
- Supported customer service engineering for in-service aircraft and cabin modification projects.
- Gained international experience at Airbus Defence and Space in Spain, with exposure to research activities, engineering design and production-line development.
- Built hands-on manufacturing experience in structural assembly, equipment installation and aircraft final assembly.

SELECTED PROJECTS

DLR Design Challenge 2026

- Co-developed the conceptual design of a technology demonstrator aircraft, contributing technical research, simulation model development and flight dynamics evaluation using MATLAB/Simulink.
- Designed and built a scale demonstrator prototype with interchangeable wing configurations and an integrated electric propulsion system.

Zoo.dev Makeathon 2026 | 3rd Place

- Designed a foldable three-blade drone rotor and a detailed electric motor assembly in Zoo Design Studio within a short competition timeframe, placing 3rd out of over 60 entries.

EDUCATION

B.Eng. in Aeronautical Engineering

Hamburg University of Applied Sciences | 2023 - Expected 2027

Focus: Aircraft Design and Lightweight Structures

Selected Coursework: Finite Element Method, Aerodynamics, Structure Design and CAD in Aircraft Design

TECHNICAL SKILLS & LANGUAGES

CAD: CATIA V5, Siemens NX, Zoo Design Studio

FEA: Abaqus, Patran, Nastran

Simulation: MATLAB/Simulink

Languages: German - Native | English - C1 | French - B1