

Andrzej Kuś

Aerospace Engineering Student | UAV Software & Engineering

Poznań, Poland · Available full-time, on-site

andrzej.stefan.kus@gmail.com · +48 506 318 232

Project experience in UAV performance modeling, propulsion analysis and software development. Interested in bringing software and hardware together through integration and testing.

Projects

Gryf — UAV Design & Engineering Analysis

Theoretical analysis and CAD modeling of a fixed-wing UAV concept. Aerodynamic calculations, structural analysis, propulsion specifications, flight profile simulations and technical documentation.

Project notes

Quadcopter Calculator

Developed a performance analysis application with Java and JavaScript/React for thrust-to-weight ratio, flight endurance and motor selection. Deployed on AWS ECS with component data in S3 and GitHub Actions for CI/CD. Built an LLM-based workflow for component data updates.

Open calculator

Skills

Python, C++, MATLAB, Java, JavaScript

Flight dynamics, control systems, aerodynamics and propulsion

Microcontrollers, flight controllers and UAV propulsion components

GitHub Actions, CI/CD, CATIA, SolidWorks and CAD modeling

AWS ECS, S3, Terraform, AWS CDK and React

Focus areas: Linux-based embedded systems, ArduPilot, Python autonomy integration, companion computers, Gazebo, SITL/HITL, sensor fusion, sensor and communications integration, telemetry, field-test safety, instrumentation, flight logging and post-flight analysis.

Education

Poznań University of Technology

BEng, Aerospace Engineering · 2023–2027

Coursework: Drone Software, Control Systems, Flight Mechanics, Aerodynamics, Object-Oriented Software, IoT on Cloud.

Languages

Polish — native · English — C1