

Flight Controls Systems Engineer

Introduction

Saab in UK is growing rapidly, with over 500 colleagues across eight sites. We bring together Swedish heritage and British expertise to drive innovation in areas such as software engineering, underwater robotics, radars, AI, and armed forces training. Joining Saab in UK means contributing to the security and resilience of society while building a career with real scope for personal and professional growth.

What you will be part of

Explore a wealth of possibilities. Take on challenges, create smart inventions, and grow beyond. This is a place for curious minds, brave pioneers, and everyone in between. Together, we achieve the extraordinary, each bringing our unique perspectives. Your part matters.

Saab is a leading defence and security company with an enduring mission, to help nations keep their people and society safe. Empowered by its 26,000 talented people, Saab constantly pushes the boundaries of technology to create a safer and more sustainable world.

Saab designs, manufactures and maintains advanced systems in aeronautics, weapons, command and control, sensors and underwater systems. Saab is headquartered in Sweden. It has major operations all over the world and is part of the domestic defence capability of several nations. *Read more about us [here](#).*

The role

This role is part of Saab Bluebear Business in Bedfordshire. It will be reporting into the Head of Digital Systems Engineering.

In this exciting, dynamic role you will support a mixture of R&D and product development activities within a leading autonomy and unmanned systems company. Blue Bear continuously innovates within the core area of Unmanned Aerial Systems (UAS/UAV) such as flight management systems, autopilots, mission systems, ground control stations, and all supporting systems and infrastructure.

Your role as a Flight Control Systems Engineer will involve developing, maintaining and testing safety critical software that contribute to the flight systems of our aircraft. You will contribute to requirements definition, and use MATLAB/Simulink tools to generate software such as novel flight control laws and data manipulation algorithms. After verification and validation performed using bespoke simulations, you will then be expected deploy the software on to the target hardware, and conduct real world flight testing at our test facility less than 1km from the office. You may be asked to present the findings of the testing in reports or customer facing presentations.

As well as undertaking technical tasks, you will be expected to take an active role in the team. This will include contribution to the development of standard operating processes, continuous improvement of methods and techniques, and ensuring quality targets are satisfied.

Working as part of a team in a multidisciplinary environment you will have good communication skills. A can-do attitude and a genuine passion for innovative technology. The opportunity will enable the successful candidate to gain knowledge of cutting-edge autonomous systems and offer a large scope for career development.

Skills:**Essential:**

- Degree in aerospace engineering or similar.
- Understanding of aerodynamics and flight mechanics, and their impact on flight control.
- Experience in using MATLAB/Simulink for developing algorithms and control laws.
- Hands-on experience in designing and commissioning control systems.

Desirable:

- Experience designing and implementing guidance, navigation and control algorithms for fixed and/or rotary wing vehicles.
- Knowledge of state-of-the-art for sensing systems.
- Hands-on experience with small UAS.
- Mathworks' Stateflow, Simulink Coder and Embedded Coder packages.
- Experience developing mathematical algorithms e.g. Data fusion, state estimation etc.
- Experience working with embedded systems, real-time systems, safety critical systems.
- Knowledge of communication systems.
- Version control systems e.g. git.
- C++, Java, Python development skills.

Other useful skills for this role:

- Experience with quality standards for software (e.g. DO-178, ED-20x).
- Existing SC Clearance.

Other Duties and Responsibilities

- To undertake such other duties and responsibilities as may be reasonably required within the grade and level of the post.
- To actively participate in Blue Bear's Performance Management Scheme.
- You will be expected to perform different tasks as necessitated by your evolving role within the company and the overall business objectives of the company.
- Some travel within the UK may be required.

Job application link:

https://saabgroup.wd3.myworkdayjobs.com/Broadbean_Saab/job/Bedfordshire---Unit-4Highfield-Park-Highfield-Road-Oakley/Flight-Controls-Engineer_REQ_37854-1