

Adon Nicholls, MIMechE EngTech (He/Him)

London, UK | +44 (0)7568 522 817 | adonijah.nicholls@gmail.com | [LinkedIn](#)

PROFESSIONAL PROFILE

Senior Systems Engineer with **8+ years of experience** delivering high-reliability solutions across aerospace, defence, and maritime domains. Proven delivery Built-In Test (BIT) architecture, systems integration, verification & validation (V&V), and full systems life cycle engineering. Skilled in **leading cross-functional teams, managing mission-critical programmes, and driving data-informed decision-making** through custom JIRA and Power BI tooling. **PRINCE2-certified** with hands-on knowledge of ISO 9001, AS9100 standards, Integrated Logistics Support (ILS) alignment, and stakeholder-facing delivery.

CORE COMPETANCIES

- **Systems Engineering:** BIT | V&V | MBSE | Systems Integration | Lifecycle Management | FMEA | ILS
- **Tools:** JIRA | Confluence | Power BI | Excel Automation | DOORS | MATLAB
- **CAD & Simulation:** CATIA | SolidWorks | ANSYS | Simulink | Star CCM
- **Programming:** Python | C++ | VBA | JIRA REST API
- **Quality & Compliance:** ISO 9001 | AS9100 | FRACAS | ECN | NCR | Root Cause Analysis

PROFESSIONAL EXPERIENCE

Senior Systems Design Engineer

Hanwha Phasor | Aug 2024 – Feb 2025 (Redundancy)

Led BIT architecture design across Ground, Aero, and Maritime platforms, **enhancing reliability and maintainability** in mission-critical systems.

- **Developed real-time performance tracking** dashboards using JIRA and Power BI, enabling data-driven decision-making at senior leadership level.
- **Strategic interface** to ILS team, contributing to technical documentation and compliance assurance.
- **Championed cross-functional coordination** and systems integration excellence in a high-accountability, fast-paced environment.
- **Led the end-to-end development** of the BIT strategy, driving integration across complex hardware-software systems.

Cluster Lead / Senior Systems Engineer

Alten UK / THALES UK | Oct 2022 – Aug 2024

Directed BIT development for the CROWSNEST ISR program, delivering software requirements definitions, test procedure development, verification testing, and responsive system support.

- **Built and led a 5 engineer team** across multiple release cycles, mentoring the team to provide an above and beyond service. **Resulting in praise and commendation** from senior stakeholders.
- **Transformed a critical risk area** into a **project strength** across software release cycles.
- **Designed and implemented a JIRA dashboard ecosystem** integrating custom APIs and Power BI visualisations. Driving informed decision-making and proactive risk management for senior stakeholders. **Leading to an 80% increase in efficiency** of BIT related meetings.
- **Expanded Alten's footprint** within Thales by proposing and delivering PMO support services within CROWSNEST by identifying and cultivating strategic partnership opportunities.
- **Initiated a professional registration support scheme** to promote chartership and technical credibility.

Principal Technical Officer (PTO)

University of Hertfordshire (UH) | Sep 2019 – Oct 2022

Took ownership of the Electrical Engineering Department at UH, providing technical support to students, staff and industry.

- **Facilitated a 60% reduction** in department overspend by **spearheading and implementing** a school-wide asset and inventory management system, streamlining operations and resource allocation.
- **Built and led a high-performing technical team (4 engineers)**, overseeing recruitment, appraisals, and career development to cultivate talent and maintain technical excellence.
- Bridged academic research with real-world innovation by **designing and executing** extra-curricular and industry-focused research projects, **securing £200,000 in KTP funding**.
- **Seconded to manage a £63 million tender** for a new SPECS building. Providing technical expertise to key stakeholders, raising concerns and providing solutions with architectural design choices.

Design Engineer & EPDM Administrator **Rotron Power Ltd. | Sep 2017 – June 2019**

Supported design and development of rotary UAV engines to BS8888 standards with close collaboration with multidisciplinary teams and worked to design and develop quality management processes and workflows.

- **Led root cause analysis** on legacy part failure, influencing manufacturing redesigns **leading to a 100% reduction** in part failure rate from manufacture.
- **Automated key workflows** via custom APIs to **reduce engineering process bottlenecks** enabling a **50% increase in productivity** for engineering and procurement teams.
- **Created QMS tools** such as ECN, NCR, and FRACAS in compliance with ISO 9001 and AS9100, achieving **100% audit compliance**.

QUALIFICATIONS

MEng Aerospace Engineering with Space Technology
University of Hertfordshire | 2012 - 2018

BEng: First-Class Honours | MEng: Upper Second-Class Honours

MEng Team Project - Design of a Self Stabilising, Two Wheeled Electric Vehicle - First-Class

- **Led the design and development** of the power and power control systems including wiring loom.
- **Developed skills in machining, rapid prototyping and fabrication** to build a demonstrator.
- Applied automotive standards for the systems design aligning with real-world engineering practices.

Certifications: CMI Level 3 Principles of Management and Leadership | CMI Level 3 Team Leader/Supervisor | PRINCE 2 Foundation & Practitioner | Previously UK SC Cleared

Achievements: Engineers without Borders Reshaping Engineering 2022 Award - *Creating Engineers with Ethics*

PROFESSIONAL MEMBERSHIP

Member (MIMechE) – Institute of Mechanical Engineers (UK)

EngTech Registered – Institute of Mechanical Engineers (UK) (Working towards CEng)

INTERESTS & ACTIVITIES

Sustainability & Innovation: Founder of Andraste Group, a UK Space Agency-backed startup developing ISO 23312-compliant orbital sustainability systems.

Governance: School Governor, **leading curriculum quality oversight** and strategic liaison with academy trust.

Property Renovation: Managing phased home renovation, **budgeting, planning, and contractor coordination**.

Community Leadership: Founded a local resident action group, coordinating with local authorities, **organising neighbourhood safety and support initiatives**.