

Howstan Engineering Limited

Consultant Curriculum Vitae

For security reasons, personal details and dates have been removed from this online CV. Please use the 'Contact Us' section for any queries.

Current Security Clearance: UK[SC]

Nationality: British

Profile

A highly motivated **REQUIREMENTS DATABASE MANAGER AND DEVELOPER** with experience working on major projects within the UK defence industry and an in-depth knowledge of **Telelogic DOORS, DXL** and **UML**. Experience in **requirements capture and analysis** throughout the product life cycle.

Expertise

- Extensive knowledge of Telelogic DOORS – including database management and requirements capture and requirements analysis
- Telelogic DOORS Extension Language (DXL)
- ARTiSAN Real Time Studio (UML 2.0)
- Bespoke toolsets for integrations between DOORs, RTS ARTiSAN and Microsoft Office
- Visual Basic 6 (and VBA)
- DocExpress, WEXP
- In-depth knowledge of Java, C, SQL, Ada95, OO, XML
- Configuration Management (Telelogic DOORs - CPS and 3rd Party applications - Allchange)
- A sound understanding of ARINC 429 and MIL-STD 1553B protocols (along with other standard aircraft bus protocols)
- A good Systems Engineering background
- Proficient use of Microsoft Office products.
- Exposure to other tools / concepts: Matlab, Simulink, Allchange, IMA design

Achievements

- Played a key role in the requirements capture / design and development of a system wide ICD tool. This tool allowed a simple user interface for the sub-system engineers, system architects and software development engineers.
- Development of a bespoke configuration management system to compliment the existing Telelogic DOORs CP system in line with company operating procedures which had not been possible using 3rd party CM tools.
- Development of toolsets allowing traceability of requirements through to test results and evidence of requirement compliance within a single database. This toolset also provided the capability to produce essential reports and metrics throughout the project life cycle which were delivered to the customer to meet contractual obligations.
- Key role in the development of a systems interface model in UML 2.0 between internal and external sub-systems arriving at a mutually agreed solution with the customer.
- Developed a company-wide extension toolset for DOORs in DXL allowing automated production of requirements documentation (such as SSRS, Compliance Plan and SoW) from one central repository.

Experience

Newly formed UK Venture for Major US Defence Corporation Requirements database developer

- Responsible for the management and analysis of requirements and ICDs within the Telelogic DOORS environment for a major MoD project.
- Heavily involved the development of bespoke add-ins and customisations to the Telelogic interface using DXL. This frequently involved integration with other company tools including RTS ARTiSAN and MS Office for metrics gathering, reporting and UML model development.
- Led to supporting roles within the test team and software development team where requirement or ICD information was migrated from one environment to another including the auto population of testing tools.
- The role had many responsibilities and support was given throughout the company for many different problems.

Aerospace Sub-System Manufacturers Systems Engineer

- Mainly involved testing and verification of requirements for a power distribution sub-system for the Boeing 777 aircraft. Main responsibilities included developing new test schedules and test procedures upon the arrival of new requirements from the customer.

Global Rotorcraft Design and Manufacturer Senior Avionics Systems Engineer

- Worked on the mid-life update for the Merlin Mk1 Helicopter. This involved Interface and System modelling in UML flowed down from the System and Sub-System Requirements.
- Lead role in the maintenance and further development of IRS and ICD management software in DOORS.
- Sole responsibility for the development of standardised and automated requirements documentation from DOORS working under a prestigious US Government contract. Subsequently, this toolset has been approved for Company wide use.
- Began development of an IRS and ICD Management toolset in DOORS. This required substantial research across many departments in order to compile a detailed Specification leading to a UML based design in line with the Company's Software Development process.
- Creation of UML models as part of a risk reduction exercise for a major future UK MoD contract utilising the emerging ASAAC draft standard.
- Liaised with hardware suppliers and carried out Acceptance Testing to prove conformance against Requirements (Arinc429 and Mil-Std 1553B).

Education

University of York MEng (Hons) in Avionics

- Set out as an Electronics Degree, later specialising in Avionics Systems and Control Engineering (this included Flight Control).
- Introduced to various Software languages and techniques including OO, Java, C and UML.

A-Levels: Maths (A), Technology (A), Physics (A).

GCSEs: 12 A-C grades.