

# Thomas Higson's Curriculum Vitae

Last updated April 2019  
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## About me

I am a **PMI certified** agile product owner with a background in software engineering and software management. I have 12 years' experience ranging from developing experimental prototypes to providing in-service support

I keep my technical skills well-rounded through:

- Developing personal web apps, such as [this one](#), which presents my CV
- Developing small personal projects such as home automation systems
- Building my own computer hardware

I am passionate about:

- Open, trust-based relationships, where all contributions, suggestions and concerns are valued
- Using objective analysis to find compromises and common ground between strong, differing opinions
- Breaking complex problems into small, simple blocks

## Fields of expertise

- Product management
- Stakeholder management
- Mentoring and training
- Scrum agile software development
- DevOps
- Cloud architecture
- Web apps and services
- Modularity and reuse across product lines
- Automotive engineering
- Safety engineering

## Technology proficiencies

- JIRA
- Artifactory
- Azure
- REST & OData
- Progressive Web Apps
- Git
- Rational Rhapsody
- Angular
- JavaScript / TypeScript
- IQ-RM Pro
- FaultTree +
- Rational DOORS
- Java
- C#
- SQL
- Windows Server
- Oracle Database

# Experience



## Principal Engineer

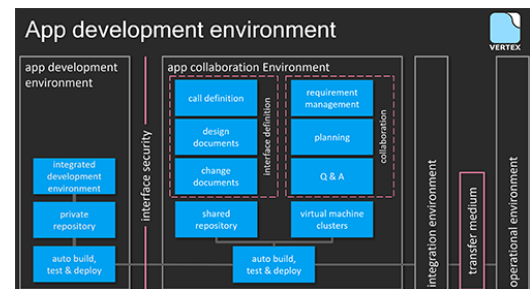
**General Dynamics** since Sep 2017 (1 year, 7 months)

References available from **Bina Taylor**

### Product Owner: Switch

I manage General Dynamic's **Software** integration and **testing collaboration home**, or **Switch**. Switch is a DevOps environment intended to rapidly integrate apps into the **MORPHEUS EvO network architecture**.

This involves spending time with 3rd party developers to help them smoothly integrate their applications onto specific military hardware and software. As I do so, I feed their integration needs into the Switch development team by connecting our engineers with theirs.



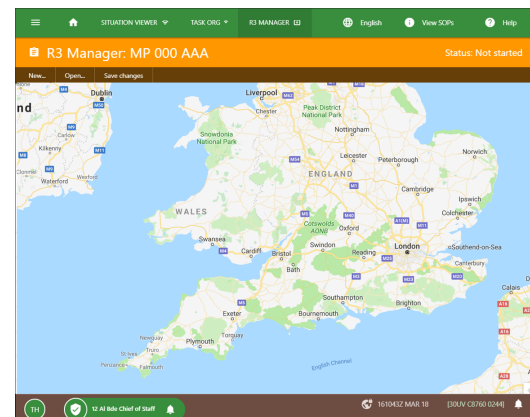
Switch emphasises open, collaborative working with shared deployment pipelines, plans, wikis and question and answer systems.

### Product Owner: APOC

As part of General Dynamic's Vertex research and development department, I manage the upcoming **Application Platform for Orchestration and Collaboration**, or **APOC**. APOC recently successfully demonstrated its ability to integrate web apps onto military platforms with higher levels of control and at much lower cost than with traditional integration methods.

Aimed at tactical defence markets, APOC is specialised to:

- Use open interface standards to help the Ministry of Defence achieve their **Defence as a Service vision**
- Emphasise collaborative, data-driven use cases, including existing military ways of working



## Personal Development

## Certifications and development activities

I am proud to be a **PMI Agile Certified Practitioner**

My other certifications include:

- Certified training instructor
- Mental health first aid certified
- Security cleared to UK level 2 (Secret) since November 2007

I enjoy presenting at technology conferences when I have the opportunity. Topics I have presented so far include:

- Specialising the Systems Modelling Language for safety analysis
- Analysing the safety of intended functions
- Apps in defence
- Blockchain in defence

I am passionate about pursuing STEM activities such as

- Providing demonstrations at local schools
- (previously) Helping organise MBDA's annual Robot Rumble event



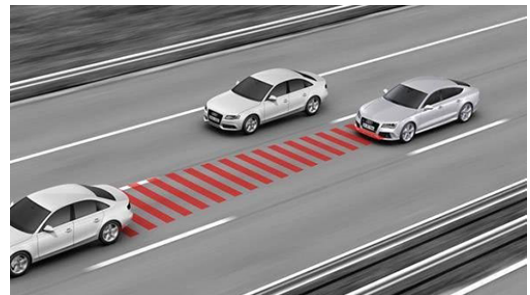
## Engineering Manager

**ZF TRW** Sep 2016 – Sep 2017 (1 year)

### System safety lead for radar customer projects

I was responsible for assessing the safety of advanced driver assistance systems. A demonstration of some of the systems I contributed to can be seen in [this video](#). My contributions included:

- Delivered safety cases for autonomy level 1 (hands on) systems
  - Led an activity to adapt a passenger vehicle safety case for trucks
  - Analysed the safety impact of different sensor configurations
  - Worked alongside project managers to plan system and safety milestones
  - Acted as the primary point of contact between prototype and project development teams
- Assisted in developing concepts for autonomy level 2 (hands off) systems

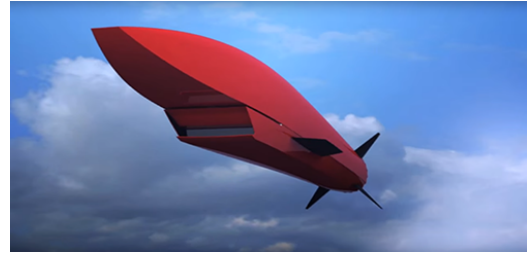


## Principal Engineer

**MBDA Systems** Jun 2009 – Sep 2016 (7 years, 3 months)

## System architect for Future Cruise & Anti-Ship System

I was responsible for the system architecture of a future system. The concept of the system is demonstrated in [this video](#). My contributions included:



- Created a trade model to identify, assess and resolve the project's major decision points
  - Focused on integration onto multiple existing infrastructures, interoperability, network architecture and the implications of new technologies
  - Captured and traded the customer's needs through a set of international workshops
- Scoped and planned activities for teams

## Flight path management domain lead for Fire Shadow

This [urgent operational request for a novel loitering munition](#) demanded innovative, rapid development. I was responsible for aspects of the system relating to flight path management. My contributions included:



- Worked with software suppliers to clarify requirements and ensure quality
- Specified the interface between internal and external software teams
- Managed work packages for several systems engineers and test engineers
- Received a Contribution to the Business award at the MBDA 2011 National Awards