

# HARRY HOLDEN

SOFTWARE DEVELOPER

MEng (Hons)



## KEY SKILLS

**Excellent problem solving ability** - built over a 7 year career in engineering working on highly complex problems across multiple domains.

**Exceptional Team Worker** - extensive experience working in highly collaborative environments and multinational cross-functional teams.

**Committed to professional development** - keen and quick learner always looking to be the best I can be and mentoring others to achieve their best.

[www.thediplodocus.co.uk](http://www.thediplodocus.co.uk)

## CAREER

### Full Stack Software Developer

FARMHEDGE (WWW.FARMHEDGE.IE/)  
MAR 2021 TO PRESENT

- Primary developer for front-end software for all products, developing PWAs and CRM tools utilising the Angular framework, Ionic and agile working practices.
- Played a central role in the design cycle for all products. Liaising with customers to understand their requirements, converting the requirements into UI/UX design templates and implementing finalised designs into the software.
- Lead on all testing activities. Creating and maintaining the entire test suite (e2e and unit testing) for all products.
- Developed back-end functionality using TDD principles (Hapi.js and MongoDB).
- Created and maintained the NPM library packages for shared code and logic.

### Trainee Software Developer

\_NOLOGY  
SEPT 2020 TO DEC 2020

- Rapid learning & application of new coding languages, frameworks & libraries.
- Developed websites, games, single page applications and APIs using OOP & MVC principles and a range of tools across the full stack.
- Participated in a client project developing a responsive web application using agile principles.

## TECH SPECIALISATIONS

### Coding Languages:

HTML5, CSS3, JavaScript, TypeScript, Python, C++, PHP, Matlab

### Front-end Libraries & Frameworks:

Angular, Ionic, React & Redux, Qt, Sass, Materialize, Bootstrap

### Back-end Development:

Node.js (Hapi, Express), Firebase (authentication, Firestore, hosting, Cloud functions), Redis, Django, MongoDB, MySQL

### Software Development:

End-to-end testing (Protractor), unit testing (Jasmine, Jest & Enzyme), Git, NPM, Yarn, Babel, SPAs, APIs, authentication & authorisation, OOP, Visual Studio Code, Xampp

### Full Stack Software Developer (Voluntary)

LYKKELI CIC  
DEC 2020 TO PRESENT

- Lead developer for back-end software (Hapi.js/Redis) from architecture design, to implementation and testing.
- Developed component architecture for front-end technologies using React and implemented critical Redux functions.

### Modelling & Simulation Specialist

AIRBUS LTD. FILTON BRISTOL  
INERTING AND FLUID PHYSICS GROUP, FUEL SYSTEMS  
SEPT 2015 - MAY 2020

- Contributed to the development, improvement and testing of in-house tank and thermal modelling software, implementing the automation of multi-analysis tasks.
- Project lead for thermal modelling certification tasks related to A320neo ACJ & A321 ACF. This involved model software design, build, test (verification) and deployment. Coordinated the data acquisition aspects for the model validation flight test campaign.
- Focal point for all fuel system tank modelling spatial analyses. Developed a multi-path modelling technique to increase modelling efficiency based on the level of design maturity, from concept to in-service modifications.
- Fuel system requirements design lead for future projects - alternative fuel aircraft concept design. Aiding architecture design and definition for the fuel distribution system through agile working methods.
- Supported fuel system lecture series, providing teaching to new employees on the methods, tools and practices employed within the modelling group.

# CONTACT


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 [harry.holden.17@gmail.com](mailto:harry.holden.17@gmail.com)

 Bristol, UK

 [www.thediplodocus.co.uk](http://www.thediplodocus.co.uk)

 [github.com/hholden17](https://github.com/hholden17)

 [github.com/Diplodocus-the-Diplodocus-King](https://github.com/Diplodocus-the-Diplodocus-King)

 [linkedin.com/in/harry-holden-5b11a274](https://www.linkedin.com/in/harry-holden-5b11a274)

References available on request.

## EDUCATION

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### (2008-2012) University of Manchester

MENG (HONS) AEROSPACE ENGINEERING, UPPER SECOND CLASS (2:1)

- Masters dissertation project: UAV product design and development, project lead on structural engineering and CAD design.
- Bachelors dissertation in the field of Thermoacoustic cooling requiring capabilities in data collection, processing and analysis.
- Specialised in modelling & simulation, spacecraft systems, rocket propulsion, hypersonic flow dynamics and acoustics.

### (2006-2008) Runshaw College, Leyland

A-LEVEL: MATHS (A), FURTHER MATHS (B), PHYSICS (A), ICT (A)

## VOCATIONAL QUALIFICATIONS

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### Duke of Edinburgh Award

Bronze (2005), Silver (2007), Gold (2009)

### PADI Open Water Scuba Diver

Open water diver (2001), advanced open water diver (2006)

### ASA Level 1 Swim Teaching Certification

Full, clean UK driving licence

## CAREER (CONTINUED...)

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### Landing Gear Installation Engineer

AIRBUS LTD. FILTON, BRISTOL  
LANDING GEAR STRUCTURES  
MAR - SEPT 2015

- Responsible for the kinematic & spatial modelling of new landing gear concepts, facilitating the conversion of mechanical designs into a dynamic model.
- Supported assessments on landing gear designs related to clearance, bonding, corrosion and abrasion for certification validation.

### Landing Gear Structures Engineer

AIRBUS LTD. FILTON, BRISTOL  
DIRECT ENTRY GRADUATE SCHEME - LANDING GEAR  
SEPT 2013 - MAR 2015

- The Airbus graduate scheme was an intensive 2 year programme based around 3-6 month placements in areas of impactful responsibilities helping to develop extensive team working experience, cultural and inter-personal awareness, along with a high degree of Airbus business and product knowledge. Highlights are listed below.
- Focal point for landing gear maintenance clearance tasks for the A320neo flight test campaign and the time critical first flight based in Toulouse, France.
- Lead on landing gear test failure resolution enabling the successful certification of the A350 aircraft.
- Primary lead on A380 major modification development, successfully implementing project initialisation for multiple airworthiness modifications.
- Resolved more than 20 in-service issues and aircraft on ground scenarios, some requiring a solution in less than 4 hours.
- Management and participation in Airbus STEM outreach programmes to motivate and educate young people in the benefits of pursuing STEM related careers.

## INTERESTS

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- **Vegetable growing** - proud owner of an allotment since 2016. Developed a jungle of brambles to a working plot. Requires a high degree of dedication, persistence and above all else patience. Since its beginning has helped nurture a passion for growing food for others.
- **Electronics** - developed a passion for making Arduino based electronic devices, mainly to provide environmental data acquisition for my allotment. Hoping to build a better understanding of hardware and electrics.