# Tim Iland





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#### Education

MEng Mechanical & Manufacturing Engineering, The University of Warwick, UK

(2012 - 2017)

Graduated 2017 with 1<sup>st</sup> Class Honours

Secondary Education, Alexandra Park Secondary School

(2004 - 2012)

• A-levels: A Physics, A Maths, B Product Design / GCSE: 10A\*s, 10As

### **Skills**

Design for Manufacture	Additive Manufacturing	Polymer Manufacturing	SolidWorks CSWE
Injection Moulding	FEA Simulation	Technical Drawings	Microsoft Office Automation
Web Development	Tooling Design	Presenting / Training	Mechanical Design

**Web Development** – Having worked in software-oriented roles for my entire career, and also being a keen graphic designer, I instantly became interested in Web Development. I specialise in React SPA's. Website here.

**CAD Design** – I specialise in SolidWorks and am proficient in some of its most difficult areas such as automating processes, surface modelling and tool design. I have also hosted some <u>Youtube tutorials</u> for the CAD community to help with advanced modelling techniques, acquiring over 7,000 views on one such video.

## Experience

# Software Applications Engineer, DriveWorks, Lymm, UK

(August 2020 - Current)

DriveWorks is a business automation software that specialises in SolidWorks automation, but is constantly encroaching into the realm of ERP software.

#### Personal Responsibilities

- Specialised in Web Implementations of DriveWorks Using Javascript to integrate DriveWorks into online product configurators
- Built DriveWorks React component Library
- Second line support
- QA Unit testing
- Release Process
- Build DriveWorks demo projects
- Hosting

#### Projects / Achievements

- Glifo 3d Printing project
- Give it some time to fill up 😉

## Polymers Applications Engineer, 3T-AM, Newbury, UK

(April 2019 - Current)

3T-AM are one of the UK's leading Additive Manufacturing suppliers, specialising in laser sintering to manufacture high quality end-use parts. Businesses from across the globe and in a myriad of sectors trust 3T to produce parts for their supply chain.

#### Personal Responsibilities

 Set up over 1,000 builds, adapting to suit customer requirements and thus ensuring nearly consistent part quality and on-time delivery of 97% - winning several long-term accounts with excellent quality and maintaining many others with consistent results

- Work under pressure and turn around fast track orders in as little as 1 day, helping to sustain a lucrative revenue stream for the business
- Use SolidWorks to design customer parts, jigs, CNC fixtures and internal samples
- Fix and modify customer CAD data, reporting back any potential build issues
- Create specifications for new product introductions, optimising our process for the customers' requirements
- Participate in continuous improvement activities

#### Projects / Achievements

- Designed a face shield for the NHS of which 100,000 were eventually ordered an order worth £650,000
- Wrote custom programs for SolidWorks to automate processes such as part marking or exporting files automating daily tasks and saving up to 5 hours a week for each of three team members
- 3T was able to offer these automated processes to its customers, each order generating up to £300 of added revenue
- Used VBA within MS Word / Excel to automate document generation saving half an hour on every build and reducing errors on build paperwork to zero.
- Worked with the IT team to improve our internal build planning software, cutting even more time and effort from build setup, eventually making a 3 hour error-prone process take as little as half an hour.
- Led a CAD training program for other Engineers, focusing on the most useful skills for the business trained four engineers to SolidWorks CSWP certification

## **Applications Engineer**, Solid Solutions, Learnington Spa, UK

(August 2015- August 2016)

1 year placement undertaken prior to earning my Masters degree. Responsibilities centred around value-added services for the 9,000+ businesses which SolidSolutions sells CAD products to.

#### Responsibilities

- Solved 880 customer issues with an emphasis on providing exceptional customer service
- Used my ability to solve difficult modelling challenges, especially surfacing and imported files to help both colleagues and customers
- Instructed customers to use SolidWorks CAD products on 5 different training courses
- Created additional content for my training courses to provide extra value all courses I taught received 100% positive feedback

#### Projects / Achievements

- Delivered several bespoke consultancy projects including drafting, modelling, and simulations
- Learned to use VBA to program bespoke add-ons to optimise the customer's design process
- Passed 14 SolidWorks Certifications including CSWE

## Other Experience

## Supervisor Ski Technician, Fairmont Rentals, Whistler, Canada

(October 2017- June 2018)

After demonstrating my ability to improvise and provide excellent customer service I was asked to take on additional responsibility as the supervisor of a team of 15 other technicians.

## Lead Manufacturing & Design Engineer, Warwick Submarine Project (Octob

(October 2016- July 2017)

Part of gaining my MEng, the task was to design and build a human powered submarine for the International Submarine Races. I led the design and manufacturing strategy for the Submarine, designing many of the components myself.

## Mathematics Teacher, Makupula Secondary School, South Africa

(July 2014 - August 2014)

Through The University of Warwick's 'Warwick in Africa' program I taught maths to secondary school children in a South African township on the outskirts of Cape Town for two months in the summer of 2014.

## **Personal Interests**

Gymnastics / Breakdance - I have coached Gymnastics and Breakdance in the past and now enjoy training every week.

**Graphic Design / Web Development** – I have worked as a freelance graphic designer in the past. I specialise in vector graphics (SVGs) and have developed my skills to use vector graphics on the web, producing crisp and responsive websites. My preferred web stack is MongoDB, React, NodeJS, Sass.

**CAD Design** - You can find a portfolio of some of my CAD work <u>here</u>. I have also hosted some <u>Youtube tutorials</u> for the CAD community to help with advanced modelling techniques, acquiring over 4,000 views on one such video.

References available on request