

Jonathan Wells

Born: 26th November, 1968
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An experienced and enthusiastic industrial/mechanical design consultant. Has designed products across many areas of industry, from one-off's to devices manufactured in the millions. Typically electro-mechanical & consumer electronic devices but also motorsport devices, scientific analysis instruments, fabricated enclosures, custom equipment, audio products, wifi devices, wearable tech and motor boats. Able to collaborate with large teams or autonomously as a consultant. Equally competent sketching concepts, assisting with design brief creation, building prototypes, modelling detailed surface CAD geometry or preparing manufacturing drawings. Have a considerable track record of designing products for volume manufacture. Has a strong sense of responsibility, excellent verbal and written communication skills and the ability to work under pressure.

Education:

Central Saint Martin's College of Art and Design, London September 1988 - July 1991

- BA (Hons) Degree Industrial Design (Engineering).

Colchester Institute, Essex. September 1985 - July 1988

- BTEC OND Industrial Design (Engineering).
- 'A' Level Art.

The Plume School, Essex September 1980 - July 1985

- 'O' Level English Literature and Language, Graphical Communication, Physics.

Work Experience:

Industrial/Mechanical Designer
Jon Wells Design Ltd. Cambridge, UK September 2004 - Present

Recent work examples:

- **Client: Clearview Intelligence Ltd.** Designed LED-based intelligent road studs/illuminators. Responsible for all industrial and mechanical design activities including concepts, details, FEA study integration, DFM, manufacturing drawings (using Inventor), including all internal detailing and components assembly features, the method of manufacture and the delivery of fully constrained and robust CAD geometry.
- **Client: Barista Verde Ltd.** Responsible for the industrial design of innovative and ground-breaking coffee machine for the domestic market.
- Responsible for the external surfaces and structure. Supported the mechanical design team with the interaction between outer casework, ergonomics and internal mechanisms. Oversaw DFM reviews, prepared manufacturing drawings and designed coffee preparation accessories.
- **Client: Airgain Inc.** Responsible for the industrial design of custom wireless antenna devices.
- Supported the industrial/mechanical design team with the development of product enclosures (using Solidworks), including all internal detailing and components assembly features, the method of manufacture and the delivery of fully constrained and robust CAD geometry.
- Oversaw DFM reviews, prepared manufacturing drawings and supported the design team on other wireless antenna products in development.

- **Client: McLaren Applied Technologies.** Assisted in the design of a race ECU (engine control unit) for application to Nascar and Indycar and was responsible for leading research into new methods of fabrication and final assembly.
- As part of the mechanical design team I developed the product enclosure (using SolidEdge), including all internal interface and support components, the method of manufacture and the delivery of fully constrained and detailed CAD geometry.
- Designed final assembly jigs & fixtures, prepared manufacturing drawings and supported the design team on other race-derived products in development.
- **Client: Fluidic Analytics Ltd.** Assisted in the design of the Flow Mk-1, a ground-breaking lab instrument comprising disposable microfluidic chips and touch-screen equipped benchtop reader that provides users with highly accurate measurements of protein concentration and size.
- Reporting to the mechanical design team I developed the product enclosure (using SolidWorks), including all internal interface and support components, the method of manufacture and the delivery of fully constrained and detailed CAD geometry.
- Created product renders (using KeyShot) to assist in the communication of the finished product.
- The product is now commercially available.
- **Client: Kynesim Ltd.** Designed enclosure and system integration for public transport fare platform
- Worked as an integral part of design providing all industrial and mechanical design input.
- Prepared detailed designs of product enclosure for manufacture using multi-action injection mould tooling.
- Created product renders (using KeyShot) to assist in the communication of the finished product
- Oversaw liaison with product manufacture partners in the UK and far East.
- Prepared manufacturing drawings for construction of injection moulded parts.
- **Client: The Raspberry Pi Foundation.** Designed 'flight case' enclosures for Astro-Pi computers that were deployed on the International Space Station in 2015 and again in 2021.
- Prepared designs of product enclosure that could contain the Astro-Pi computer PCB's, could dissipate heat in zero gravity and be as low-mass as possible.
- I created parts (using SolidWorks) which would be CNC machined in space-grade aluminium alloys and then oversaw the subsequent anodising and laser-etching processes (for product graphics).
- Supported the Astro Pi team at the Raspberry Pi Foundation in the subsequent customisation of the case design so that it could be reproduced using inexpensive 3D printing equipment.

2020 - **Client: Clearview Intelligence Ltd**

Designed enclosure and system integration for a series of road stud products

Client: Nuclera Ltd

Designed a range of DNA and RNA analysis equipment

Client: Limbalance Ltd

Supported small start-up with design & production of arm difference disability exercise tools

2019 - **Client: Cambridge Sensotec**

Supported internal team with the development of automated/robot test equipment.

2018 - **Client: Asymptote**

Designed cryogenic transport devices

Client: Floodflash

Design of flood-risk evaluation equipment

Client: PervasID

Support development of RFID equipment

2017 - **Client: PDD**

Supported design department with a range of products

Client: CorviaLtd

Supported design department with transport payment equipment

2016 - **Client: Narrative Studio**

Designed range of baby bathing product concepts - surface modelling studies

2015 - **Client: ErgoStick**

Designed enclosure and system integration for 'Ergo' rowing machine blue-tooth dongle.

- Client: 42 Technology Ltd**
Supported design department on a range of projects.
- Client: Adder Technology Ltd**
Design of hardware for Adder's range of products.
- Client: Round Peg Ltd**
Supported design department on a range of projects.
- Client: Zoomer**
Designed development model of child transportation device.
- 2014 - **Client: Sepura**
Prepared concepts for wireless communications device enclosures.
- Client: Audio Analytic Ltd**
Designed evaluation kit enclosure and internal integration.
- Client: Airedale Ltd**
Supported marketing dept in creation of high-quality rendered images of product range.
- 2013 - **Client: Amino Communications Ltd**
Designed internal structure and external caseworks for IPTV device
- Client: English Harbour Yachts**
Assisted in the design of the EH27/29 motor yacht.
- 2012 - **Client: Beagle Garden Products**
Assisted in the design of garden mole trap.
- Client: Detectortesters Ltd**
4 month contract to design department.
- Client: IDC**
Supported design department on a range of projects
- 2011 - **Client: Malvern Instruments Ltd**
Designed caseworks for scientific analysis equipment.
- Client: Case New Holland (Tractors) Ltd**
6 month contract to design department
- Client: Digital Vision TV Ltd**
Designed Freeview set-top box & PVR equipment
- Client: Fairline Boats Ltd**
Short-term contract to design department
- Client: Smart Control Systems**
Designed a control box for off-shore crane operator installation.
- Client: Omega Laser Ltd**
Designed range of laser treatment devices.

In summary I provide industrial and mechanical design services on a consultancy/contract basis incorporating SolidWorks, Autodesk Inventor, SolidEdge, Rhino3D & Keyshot. I have an extensive knowledge of manufacturing processes and materials science, 3D CAD surfacing, and the design of parts for manufacture using injection and rotational moulded plastic, sheet metal, cast and extruded alloys, PU castings, SLA and SLS (additive) parts and machined metals. Owner of the product development process, and responsible for delivering on all key milestones from design through to delivery of final product. My consultancy placements have often involved teamwork and the ability to manage numerous projects concurrently, successfully delivering design solutions to project deadlines.

Prior to establishing JWD Ltd in 2004 I have the following employment history:

Industrial Designer

Amino Communications, Cambridgeshire

March 2000 - September 2004

Responsible for delivering all industrial & mechanical design activities for mass-produced network and IPTV equipment, including set-top boxes, hand-held devices and custom connectors. Owner of the product development process, from initial sketch to sign-off of manufacturing drawings, forging partnerships with on-shore and overseas manufacturers and suppliers, overseeing the transfer to production, and project managing new product development. My design for the AmiNET110 IPTV set-top box won the Red Dot Design Award in 2003.

Snr. Industrial Designer

TAG McLaren Audio Ltd, Cambridgeshire.

June 1998 - November 1999

TAG McLaren recruited me into the newly created Industrial Design team to design and develop audio-visual, lifestyle and high-end audio products. I developed a variety of concepts & products, working primarily in castings, sheet metal parts, injection moulded plastics and composite resins. I was also responsible for fabricating prototypes, liaising with suppliers and project management.

Product Design Engineer

Psion Computers, Marylebone, London.

May 1995 - May 1998

I was responsible for the development of a number of products under manufacture by Psion in the UK, specifically as part of the Psion Series 5 Palmtop Computer team. This included injection moulded part design, packaging and some graphic design and product labelling. I was also responsible for creating and producing service documentation and I project managed the development of peripheral & software products.

Product Design Engineer

MG Electric (Colchester) Ltd, Essex.

November 1993 - May 1995

I designed and developed aspects of the medical and printing press peripheral equipment the company manufactures. I also designed an exhibition stand for the company's presence at a major European exhibition, created presentations and produced (and illustrated) service documentation in 12 languages.

1 year travelling Australia and South East Asia.

September 1992 - August 1993

Product Designer

Eaton Hall Product Development, Cheshire.

September 1991 - July 1992

The 1-year scholarship to Eaton Hall Product Development enabled me to take my final year degree project (a blast chiller concept) from the drawing board through all stages of development to pre-production. This unique opportunity gave me the valuable experience of highly detailed design activities, budget management, technical expertise and marketing strategies.

Draughtsperson

Maunsell Civil Engineers, Essex.

June 1989 - September 1989

I took temporary employment with Maunsell working on numerous civil engineering projects to develop my technical illustration and draughting skills.

Software Skills:

I own a licensed seat of Solid Works Professional and Autodesk Inventor and I have experience of Siemens PLM SolidEdge and Luxion Keyshot. I also have experience of Rhino3D, Corel Draw and Microsoft Office 365.

Professional Qualifications:

Siemens PLM SolidEdge Surface Modelling

Siemens PLM SolidEdge Advanced Modelling Strategies

Project Management Skills & Implementation.

PC Network Management.

Professional Achievements:

Malvern Instruments' Morphologi G3 wins Instrument Business Outlook's 2008 Gold Award for analytical instrument industrial design.

Amino Communications' AmiNET110 wins "Good Design" award from Chicago Athenaeum Museum and also "Outstanding Design" in the 2003 Red Dot Design Awards Product Design competition.

Domestic Iron concept wins The Award for Excellence in Design: 1991 LG (Goldstar) international design competition.

Other Skills & Areas of Interest:

Fully conversant with modern rapid prototyping techniques.

Full UK driver's license.

Enjoy many sports including triathlon and skiing.

I enjoy music a great deal, both recorded and live, and I produced and presented a show on a community radio station for 5 years.