



BARNEY NEAL

Product Design Engineer

The Orchard, Birds Lane,
Epwell, OX15 6LQ
Website: www.barneyneal.co.uk
Email: barneyneal96@gmail.com
Mobile: +44 (0) 7800900334

Biography

I'm a 22 years old product design engineer and product creator from rural Oxfordshire, UK. I am currently in my final year of study with over two years of work experience. I love to travel, play rugby and lead a very active lifestyle.

I am both focused and creative with the vision to take projects from concept to completion. Studying Product Design Engineering at Loughborough University has equipped me with an excellent design and engineering understanding. This, in addition with a range of work experience has deeply developed my business and entrepreneurial sense.

Education

- **Loughborough University**
Product Design Engineering (MEng)
Oct 14 - Jun 19
An IMechE and IET accredited Masters degree with a diploma in Industrial Studies - At present achieving a First-class honour (Currently in Part D).
- **Bloxhamschool**
Oxfordshire
Sept 07 - Jun 14
A-level Results; A, (Design and Technology), B, (Mathematics), B (Physics), A* (EPQ).
11 GCSE's Results; 4A*'s, 4A's and 3B's.

Experience

- **Ideaworks**
Industrial Work Placement
Aug 16 - Jun 17
Ideaworks specialise in the design, engineering and integration of emerging technology such as, Audio-visual Equipment, Lighting and IT into residential and marine markets. I developed systems from concepts through to fully implemented designs. Whether this was an engineering drawing for cinema room or more creative lighting centrepiece.
- **Frostechnic**
Production Team
Jun 12 - Sept 18
Summer months at Frostechnic, a specialist in control panel design & manufacture. Here, I also experienced time at a management level managing production on the shop floor. This involved Ad hoc consideration of operations objectives to adhere to a Just-in-time plan. It was important for me to react and adjust for any deviations from plans.
- **Loughborough University**
Student Ambassador & Tour Guide
Dec 14 - Current
Helping the Loughborough University admissions team with open days and interview days for prospective students.
- **Stake Your Claim**
Website & System Consultant
Jul 18 - Current
Stake Your Claim is a start-up company aiming to develop an online system to eliminate land ownership problems in developing countries. Current work includes the design and implementation of a minimal viable product to aid in further funding rounds.
- **Other Experience**
Chandlers Arms | Bar & Waitering
Marussia F1 Team | Apprentice

Interests

- I have a huge interest in the contemporary Scandinavian style of design and I use this to influence my designs and fashion tastes.
- Physics, in particular Nanotechnology, Astronomy & Space. Particularly enjoy following the news around the large hadron collider and particle physics.
- I keep up to date with global engineering and technology advances. Especially regarding artificial intelligence.
- I consider myself very entrepreneurial and enjoy learning about new industries and start-up businesses. In addition, I find that I am an early adopter of advancing technology.
- I am very fond of classic cars and regularly attend Le Mans Classic in France. I also enjoy working on my car and motorbike. In 2014 I successfully completed an engine replacement for my Renault Clio.
- I am incredibly active and regularly go to the gym. In addition, I have an interest in diet and nutrition. Recently commencing an online diploma in Sports diet and nutrition.

University modules of interest

Individual Project (Part C - 70%)

Design of an Internet of Things (IoT) product

As part of my Part C I was assessed on the completion of a yearlong research project. A comprehensive Internet of Things (IoT) system to collect objective data regarding human-to-human communication across an organisation was developed and assessed. This lightweight, wearable device collects communication data to strategically improve the analysis of an organisations communication performance. The device makes use of a combined Bluetooth Low Energy and Wi-Fi chip to form a power efficient architecture. The complete project was then condensed into a thorough report detailing any outcomes and further work.

Additive Manufacturing | 76%

Design For Assembly | TBC

Industrial Design | 70%

Manufacturing Management | 77%

Product Design (Part C - 74%)

Application of Product design - Jaguar Land Rover

As an individual I was given the brief to design an accessory for the typical Range Rover that improves the practicality of the vehicle, without compromising the premium experience expected. This project was particularly oriented to broaden my design and communication skills. I settled for a boot storage solution. The automated system was simplistic in appearance involving two perpendicular barriers that gently encased any luggage items. The system used imbedded runners in coordination with a pulley and motor system to move the barriers. Accurate current sensing within the motors would detect the luggage providing a secure grip.

Sustainable Manufacturing | 70%

Sustainable Product Design | TBC

Product Innovation Management | TBC

Project Management | TBC

Achievements/Skills

- A keen member of Bloxham's Combined Cadet Force, Rank of Colour Sargent. This position of leadership demonstrated my ability to motivate and encourage others. However more importantly improved my self-confidence and strategic problem solving. For example, reacting quickly under fire to make swift decisions then communicate my commands precisely and accurately.
- Completed Gold Duke of Edinburgh. To complete the extra curricula activities required for the DofE programme was particularly challenging when balancing time between, academic studies, rugby, Extended Project Qualification and prefect responsibilities. Used and reinforced my organisation and methodical approach to tasks.
- Member of First Team Rugby Squad. Captained many Bloxham teams throughout my school career and Club Rugby. This also included the running of strength and conditioning sessions. Strengthening my ability to coach and motivate with individuals. Currently playing for Loughborough RFC.
- Confident IT skills, including Microsoft Office Suite, Microsoft Visual Studio, Adobe Photoshop, Adobe Illustrator and experience with Basic, C# and Arduino Programming Languages. Having studied a software engineering module where an introductory understanding of engineering related software. This has recently been strengthened during the development of my individual project.
- Proficient in a variety of CAD packages including Siemens NX, AutoCAD, Rhinoceros 3D, and the visualisation package Keyshot 6.
- Deep understanding of manufacturing processes. Which enables me to form designs with manufacture and assembly in mind whilst keeping true to a minimalist aesthetic. I am a keen believer that "Simplicity is the ultimate sophistication" - Leonardo da Vinci.
- Self-taught website design, maintenance and deployment. I have successfully set up my own web portfolio portraying a selection of my projects, as well as basic websites for clients.
- Self-taught circuit board design allowing me to design a lightweight, efficient wearable device for the completion of my individual project.
- I have a great interest in additive manufacturing, using my 3D printer to develop prototypes and further improve the success of designs.
- I have a detailed knowledge of hardware and software used in emerging consumer technology. In particular wireless communication technology and control.

References

Loughborough
Dr Mey Goh | Tutor
+44 (0)1509 227672
y.goh@lboro.ac.uk

Ideaworks
Doug Wood | Director
+44 (0)203 668 9870
doug.wood@ideaworks.co.uk

Frostechnic
Kevin Hardy | Director
+44 (0)7967170178
Kevinh@frostechnic.com