

## EDUCATION

### MSc Industrial Design

(Loughborough University) 2006-2007

During my time at Loughborough, I had the opportunity to develop upon the skill set from my engineering degree as well as learn new ones in product design. Each module required a range of skill and knowledge (such as materials and manufacturing knowledge, effective sketching, design communication and computer aided design techniques) and I found myself highly motivated by the challenges of designing products on the course, to the point of self-learning many skills in between projects. The degree culminated in a major design project as a consolidation of all the abilities learnt throughout the course to apply in the design and development of an innovative project.

#### Degree modules:

- Advanced CAD
- Design Communication Skills & RSA 2006 competition
- Research methods for design ergonomics
- Electronic Product Design
- Major Project

#### Time management

- Modules often overlapped and deadlines coincided regularly, which required working effectively under pressure while maintaining organisation and motivation to achieve goals.

#### Usability research

- I learnt new methods to approach a design problem, including directly approaching consumers to gather first hand opinions on products, as well as conduct structured prototype test sessions to gather information on usability.

#### Teamwork

- Some projects required working in groups with very different backgrounds and native languages which needed a patient approach to teamwork despite looming deadlines.

#### Communication

- I improved my sketching, sketch rendering and oral presentation technique through regular design discussions and presentations to groups of people.

#### Technical skills

- In a short time, I acquired skills in the use of ProEngineer, 3DSMax, Photoshop, Flash and Alias StudioTools through self-learning, and I also developed a quick sketching technique suitable for product concept generation.

#### Major Project

- I designed an 'Interactive Multi-function Cooking Aid' that aimed to encourage good nutrition and healthy eating. This project was conducted over a period of 22 weeks and involved user research and testing, as well as the manufacture and evaluation of multiple design iterations. The result was the creation of a working graphical user-interface and electronics prototype, designed and manufactured from the ground up, and tested with a variety of potential consumers.

### BEng (Hons) Mech. Engineering

(Durham University) 2001-2004

As part of the three year course, I was introduced to a core level of skills necessary to the approach and method to problem solving both in design and technical engineering projects. Throughout my degree, problem solving skills were tested through weekly assignments to solve technical as well as theoretical problems. Larger engineering and product design projects were the most engaging and rewarding parts of the degree and often involved groups of four or more people where project management was a necessary ability for everyone to learn.

#### Problem solving

- Engineering problems potentially had multiple solutions and so required that I become comfortable using a broad number of techniques and be skilled at a logical analytical approach in order to find the ideal solution.

#### Technical skills

- As part of my technical engineering training, I had experience with the use of a number of tools and skilled techniques for the design and manufacture of a variety of items such as electronic circuits, load bearing structures and water turbines.

#### Communication

- Throughout my degree, communicating ideas to group of people were a regular occurrence, allowing me to improve my presentation skills with a variety of media. I also had experience presenting to a company's management and manufacturing team as part of an industrial design week-long placement.

#### Project Management

- For many of the group projects at university, the team was often large and spread over different parts of the city requiring organisation and planning around a multitude of conflicting interests. As a result, I had experience with project planning and management through Gantt chart usage, scheduling meetings and responding to major setbacks.

## OTHER EXPERIENCE/SKILLS

- I attended a two-week full-time Professional Engineering Awareness Course in 2002 at TTE Management & Technical Training. I gained knowledge of various facets of mechanical, electrical and manufacturing engineering (including welding, milling, soldering, lathe working, reverse engineering).
- Completed a full-time, two-week industrial design problem solving course, based in part at Victor Products Ltd. (Newcastle-upon-Tyne). The company set the task of evaluating and improving upon their industrial electric coupler range to myself and another student and culminated in a presentation to a number of the management and manufacturing team. I gained insight into the processes involved in a products design and development as well as the manufacturing and cost-reduction processes involved in creating a profitable, yet ultimately safe product.
- Worked at Interpharm (UK) Ltd. for work experience, taking steps to evaluate and redesign the factory work level. It required a level of technical understanding of the processes involved as well as analytical and reasoning skills in order to improve the manufacturing work flow in an environment with strict health and safety guidelines
- Experienced in the use of Microsoft packages (Word, Excel, PowerPoint, Outlook)
- Experienced with creative illustration, image editing and web development software (Photoshop CS3, Illustrator CS3, Flash CS3, InDesign CS3, Dreamweaver CS3)
- Experienced in the use of 3D Modelling and rendering software (Solidworks 2007, 3DSMax 9, COSMOS Floworks, Alias StudioTools 13, ProEngineer, Autodesk Imagestudio 2008)

## EMPLOYMENT

Adecco Temp + Blue Arrow Temp Agencies (Various work) March 2005 – April 2006

- As a temp, I worked at a variety of companies and in various capacities including reception, archiving, data entry, telesales and the post room.
- Through the diverse tasks given to me, I gained insight into the day-to-day processes of the office, workshop and warehouse environment.

Gap Year (French farm house renovation project) (France) July 2004 - November 2004

- Worked in the Dordogne region, helping to restore a French farm house.

## INTERESTS & HOBBIES

- Keen photographer, have subscription to a photography magazine, was a member of the Durham Photography Society and regularly go on excursions for photographing nature.
- Passionate about Industrial/Product Design and often work on design projects in my spare time as well as manufacture prototypes when possible.
- Was an active member of the School and University Judo Club.
- Interested in electronics and design and build functional circuits in my spare time.
- Avid follower of computing and technological developments, I also build, maintain and repair computers (software and hardware).
- I have a strong curiosity for how things work and indulge through reading technical books and more scientific subject novels and autobiographies.
- Currently self-learning Korean as a third language.

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## REFERENCES

References available upon request

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## PORTFOLIO

Portfolio available at [www.paulscarfe.com](http://www.paulscarfe.com)