

CURRICULUM VITAE

Name: Tom Oakley
D.o.B: 23 September 1975

For further contact details, please contact Tom using the email form at <http://www.tomoakley.net/email.php>

Profile

A highly dedicated, intelligent and widely skilled lead engineer with flair for innovative design. By leading or working within multidisciplinary project teams, Tom consistently produces high quality safety critical designs for mass production.

Employment History

Dyson Ltd.

Wiltshire, England

Senior Design Engineer and Test Manager

April 2004 - Present

- Created, managed and motivated a dedicated team of mechanical and electronic technicians and machinists to test assemblies on the company's largest project
- Implemented a new test process based on FMEAs to feed the design team
- Controlled the company's largest project budget, in excess of £1.5m
- Fully trained in Six-Sigma Design of Experiments
- Represented and promoted Dyson by conducting external lectures, workshops and interviews

Project Manager

January 2004 - March 2004

- Organised the marketing trial of a new product in the company's largest future market
- Co-ordinated personnel from mechanical and electronic design, marketing and testing
- Improved company-wide design by writing and conducting training on tolerance allocation, process selection and gear design

Design Engineer

April 2001 - December 2003

- Responsible for concept derivation, detail design, prototyping, validation (testing), tooling, production readiness and production support
- Demonstrated close teamwork, application of engineering theory, creative and practical problem solving, and continuous supplier liaison
- Fully trained in Design for Six-Sigma (Quality Function Deployment, concept generation and selection, poke yoke, FMEA and process capability)
- Communicated and justified ideas through face-to-face contact, sketches and models, and solid computer models and engineering drawings created using 3D Unigraphics. Analyzed designs using DesignSpace

Specific achievements at Dyson

- Designed and developed a production-ready safety-critical mechanism for a new laundry product using injection mouldings, sinterings, CNC machined and sheet metal parts, along with microswitches and dc motors.
- Reduced the bill of materials of one product in production by 2% through five separate design and supply chain improvements
- Developed an innovative safety critical interlocking device to allow a product launch in a new market
- Greatly improved the reliability of an electro-mechanical device in production using careful analysis and testing with a bespoke LabVIEW diagnostic program

IBM 2000 Olympic Program

Sydney, Australia

VIP Guide

August 2000 - December 2000 working holiday

- Represented IBM on tours and technology demonstrations for international VIPs invited to the Olympic Games
- Organised medical support in emergencies

Harvard Occupational Biomechanics Laboratory

Boston, USA

Software developer and biomechanics researcher

January 2000 - June 2000

- Designed, wrote and tested a program for analyzing electromyograph results in support of commercial research on human muscle function. Results were used in US legislation
- Assisted post-doctoral researchers and assistant professors with human experiments
- Contributed to workshops and seminars on biomechanics within Harvard and without

Ricardo Consulting Engineers Ltd.

Shoreham, England

Industrial Trainee, part of ImechE MPDS scheme

September 1994 - June 1995 plus summers 1996, 1997, 1998 and 1999

- Designed and tested a wheelchair access subassembly for the Chrysler Voyager
- Wrote commercial contracts and proposals for client projects
- Improved client understanding of complex engine vibration using the finite element programs Femgen, PAFEC and NASTRAN
- Reduced emissions of diesel engines by redesigning cylinder heads using AutoCAD and ProEngineer

Education

Harvard University

Cambridge, MA, USA

Choate Fellow and Engineering Special Student

1999 - 2000

Courses in: Systems Analysis, Environmental Engineering, Ergonomics, Human Physiology (Harvard School of Public Health) and Assessing Governments (Kennedy School of Government)

Cambridge University

Cambridge, England

Masters Degree in Engineering

1998 - 1999

Courses in: Design Methods, Design Case Studies, Designing with Composites, Applications of Dynamics, Internal Combustion Engines, International Business Economics and Petroleum Engineering. Major Project on the dynamics of snake-like robots.

Bachelors Degree in Engineering, Double First Class Honours

1995 - 1998

Coursework in: Fluid Dynamics, Engineering Materials, Mechanics of Machines, Mechanics of Solids, and work, Technology and Society.

Brighton Hove and Sussex Sixth Form College, Brighton, England

Placed in the top five of all candidates (UK and other) for Design and Technology A-level. Design and Technology A, Physics A, Pure Mathematics A, Applied Science A.

Ten GCSEs at grade A.

Computer skills

- Unigraphics 3D CAD, 2000 hours
- DesignSpace FEA, 100 hours
- Minitab statistical analysis for Design of Experiments and Process Capability analysis
- Power user of Microsoft Word, Excel and PowerPoint
- Complete fluency with Unix and Windows operating systems
- Expert knowledge of HTML, WML, JavaScript and CSS
- Non-commercial fluency in Java and PHP languages and SQL databases
- LabView
- MATLAB

Other skills

- Engineering Drawings to BS 8888
- Clean and current driving license