JEREMY BOWDEN

HOUGHTON-ON-THE-HILL, LEICESTERSHIRE

jeremybowden73@gmail.com   www.jeremybowden.net
Mobile 07725 986036   github.com/jeremybowden73

ABOUT ME

With 20 years' experience in Engineering Design I'm able to bring a range of transferable skills, for example analytical skills and attention to detail. After enforced redundancy in 2017, an interest in computing and programming led me to seek a fresh start in the technology sector, which I find exciting and rewarding. I am learning with courses that develop all-round coding skills as well as language syntax, which I hope will enable me to find a front- or back-end, full-stack, or data analysis role where I can apply my zest for problem-solving through code.

TECH SKILLS

Selected Projects (refer to the Projects section of my website for further details)

My self-coded website www.jeremybowden.net shows how I've put the HTML, CSS and JavaScript I've learnt into practice.

A web scraper, which started like as a Node command-line tool, but is now a full-stack project using the Express framework as a server.

Anagram Maker, a program for creating anagrams from user input, written in C.

Mashup (a local news web app) displays news items on a map using back-end Python code and the Flask framework to access Google APIs and an SQLite database, then rendering it in the web browser with front-end JavaScript via AJAX.

Finance (a share-trading web app) uses Python code to create, change, and delete data in an SQLite database and access APIs for real-time share prices, and JavaScript to display it in the web browser.

Training

CS50x Introduction to Computer Science — edX.org / Harvard University

- Algorithms (including sorts and searches), computational complexity, memory management (pointers), structs, the call stack, data structures, web services, APIs.
- C, HTTP, SQLite, JavaScript, Python, Flask, Ajax, RegEx, Scratch.

HTML5 / CSS3 — Mozilla Developer Network

- HTML: incl. elements, lists, links, text formatting, tables, forms, buttons, dropdowns.
- CSS3: incl. rulesets, selectors, the DOM, cascade/inheritance, styling text, boxes and lists.

Full-Stack JavaScript techdegree — TeamTreehouse.com

- JavaScript, jQuery, AJAX, Node, Express, Git, CSS, HTML, APIs, TDD.

I have some experience with C# and .NET, building ASP.NET Core MVC websites for my sister-in-law's business and a database website for myself, which I plan to add a Web API to.

EXPERIENCE

- Dec 2005 - Jun 2017   Senior Design Engineer   JLG Industries, Leicester
- Mar 2004 - Dec 2005   Design Engineer   Caterpillar UK, Desford
- Dec 2000 - Feb 2003   Design Engineer   International Radiators, Leicester
- Nov 1999 - Dec 2000   Design Engineer   Dennis-Eagle Ltd, Warwick
- Oct 1996 - Nov 1999   Development Engineer   Dunlop Suspensions, Coventry

Key Engineering Skills

- Analysis of strain data from vehicle tests to improve product design
    - Reduce product design cycle time and cost by testing on rigs rather than vehicles
- Computer Finite-Element stress analysis to improve product design
    - Analyse behaviour of parts; reduce test time; fast response to real-world failures
- Dynamic computer-modelling of hydraulic systems
    - Reduce test time and cost; predict where failures will occur
- Resolve failures using '*Eight Disciplines*' methodology (8D)
    - Identify root cause of failure; prevent repeat failures; manage end-user's products

Soft Skills

- Self-managing and prioritising my time and workload
- Chairing design reviews, product improvement sessions, new product introduction meetings
- Version control of documentation using cloud-based database
- Coaching colleagues (e.g. product-lifecycle software; CAD software)
- Creating and maintaining business documents (e.g. Bills of Materials; test specifications)
- Working to deadlines (e.g. prototype vehicle builds; design freezes)
- Responsibility of ownership of work (e.g. "cradle to grave" component design)
- Working within global teams across time zones and continents

EDUCATION

BEng(Hons) Automotive Engineering Design, Class 2:2
Coventry University 1992-1996

Mechanical engineering and design; group and individual projects in automotive applications.
Stress analysis, design, materials science, maths, business economics, CAD.

A-levels and GCSEs   Burleigh College, Loughborough

A-level   Maths/B, Physics/E, Design/E
GCSE   Maths/A, Physics/A, Design/A, French/A, Humanities/A, English Language/B,
            English Literature/B, Chemistry/C

ACTIVITIES

Music (listening, playing, composing), cooking, reading, cycling, pilates, Beaver Scouts leader, family.

REFERENCES

Professional and Personal references are available on request.