

Curriculum Vitae

NAME Mark Jonathan Basten
DATE OF BIRTH 3/6/1963
QUALIFICATIONS BSc Hons. Electrical & Electronic Engineering
(2.1) Coventry Polytechnic
CEng, & FIEE
DRIVING LICENSE Full Car License, HGV Class 1 License (C+CE)

PROFESSIONAL ACCREDITATION

Chartered Engineer and Member of the IEE 20 November 1992
Fellow of the IEE 25 June 2003

EMPLOYMENT HISTORY

June 82 – Jan 86 GEC Telecommunications, Coventry

Sponsored training scheme while at Coventry Polytechnic, with placements in the advanced electronics and installation & commissioning departments

Feb 86 – July 95 Lucas Advanced Engineering Centre, Shirley

At Lucas I fulfilled a range of responsibilities as I progressed from a trainee engineer to the post of senior engineer. I was involved in the design and development of a broad spectrum of electronic systems in both automotive & aerospace applications. My key responsibilities are indicated below: -

- Databus Design Twisted pair and fibre optic transceiver design for CAN databus.
- Worked on ISO standardisation of CAN protocol with the ISO/TC22/SC3/WG1 working group.
- Throttle Actuator Designed a throttle actuation system (design patented) for traction control applications. This involved mechanical and electronic design.
- Engine management Developed a software tuning and verification system for a V8 engine controller.
- Designed development aids for the GEMS range of engine management systems.
- EPAS Designed the first generation I/O board. This included input filtering, output driver circuitry and a processor monitoring circuit for safety shutdown during fault conditions.

- Driver Support Designed a first generation image processing system based on transputers.
- Designed the input filtering for the first generation FMCW radar system.
- Designed a second-generation video frame grabber, output display and video bypass board. This included the design of five FPGA's produced using VHDL.

During my time at the Advanced Engineering Centre I also fulfilled two other roles part time, namely: -

- IT Manager I was fully responsible for the IT systems and IT strategy for the centre from 1990 through to 1996.
- CAD Manager I was responsible for the procurement and use of CAD systems within the centre from 1987 through to 1996.

Aug 95 – Oct 97 Advanced Vehicle Systems Development, Shirley

Design Manager

In August 1995 I took on the role of coordinating all project work involving the design of hardware, software and systems related work at the Lucas Advanced Engineering Centre. This involved a team of 21 engineers working on advanced techniques for designing hardware and software. The budget for this work was £650,000 that I had full responsibility for managing.

Program Manager

In March 1996 I was given the post of Programme Manager for the Lucas Electrical and Electronic Systems group of companies. This work involved direct management of a team of 12 engineers, but also indirect technical consultancy to 60 engineers in the UK, France and USA. It also involved supplier partnership development with companies in Germany and France, as well as customer program development with VW, Opel, Renault and PSA.

Department Manager

In January 1997 I was appointed manager of the Control Systems Department. This department was tasked with handling the advanced product development for Lucas tier1 electrical and electronic businesses. It extended my work with the Integrated Driver Support Project as well as further work with the Electric Power Assisted Steering developments. I was directly involved with managing 20 engineers and a budget of £1,000,000. A series of demonstrator vehicles were developed to exhibit the new product features.

Nov 97 – Jan 00 TRW Automotive Electronics, Shirley

In November 1997 the Adaptive Cruise Control (ACC) product was moving from the advanced development phase into production. I transferred into the product-engineering group with the project and took on the role of ACC Systems Manager.

This work involved the setting up of a new department with 5 full time engineers & 5 sub-contract engineers doing vehicle system integration work. This role involved working with Volkswagen and their other vehicle systems suppliers to provide an integrated ACC system. The following tasks were undertaken by my team :- Requirements capture, System design using SASD methods, System integration and System validation & calibration.

Feb 00 – Dec 01 TRW Automotive Electronics, Shirley

During early 2000 TRW started the development of a second generation ACC system (AC20). It was at this time that I was given the responsibility of being engineering manager for the first generation product (AC10) that needed to be completed ready for production.

I had full responsibility for all electrical, mechanical and software design for the sensor. I was required to take the sensor through design validation and production validation programs. It was also my responsibility to gain software sign off for the sensor from the customer after extensive test mileage accumulation.

Jan 02 – xxxx TRW Automotive Chassis Systems, Shirley

A company re-organisation brought the automotive electronics group in the main TRW Chassis Systems braking and steering organisation. I was given the engineering management responsibility for all DAS (Driver Assistance Systems) projects in the UK. This involves the engineering design responsibility for both first and second-generation ACC sensors as well as for a video lane detection sensor.