

SHORTFORM CV

DAVID LUDLAM CEng MIET

- 2005 - Executive Director, Theatreplan Ltd.
Currently working on stage automation systems in London (3 projects), Sydney (2 projects) and Hong Kong (3 projects). <http://www.theatreplan.co.uk>
Machinery control consultant and project lead on Sydney Opera House, Copenhagen Opera House and Helsinki City Theatre major upgrades.
- 2002 - Independent Engineering Consultant
Investigated mechanical actuator failures for a machinery manufacturer (torque sensors, stepper motors and LabVIEW).
Designed and commissioned a climate control system for equipment enclosures containing highly sensitive IR cameras (PID control and data logging).
Designed and implemented ground test software for a scientific experiment that will fly on the LISA Pathfinder satellite <http://www.rssd.esa.int/index.php?project=LISAPATHFINDER>
Client: Imperial College using LabVIEW, Lua script and MIL-STD-1553 bus.
Developed two remote telemetry and telecontrol application using GSM modems (Python and embedded C on ATMEL AVR microcontrollers, I2C and serial comms).
Conducted an R&D project to investigate advanced conveyor control techniques for a major food processing company (Siemens S7-200 PLC, RS485 comms, strain gauges, PID control).
Worked as a freelance consultant for Theatre Planning and Technology Ltd. Responsible for the stage machinery electrical engineering and control systems for a new Opera House in Copenhagen. Project responsibilities: up to £10m
Developed the user interface for the remote telemetry of high power battery charging systems for a leading European company in this field (LabVIEW, LabWindows CVI, RS485 networking with bespoke protocol).
- 2002 Engineering Manager, Barbican Theatre, London
Worked for the Corporation of London for 8 months to hand over the theatres following the departure of the Royal Shakespeare Company. Completed the £400k refurbishment of the powered scenery flying system. Trained new staff members.
- 1988-2001 Engineering Manager, Barbican Theatre, London
Employed by the Royal Shakespeare Company. Responsible for the design and management of all types of stage machinery for the RSC's venues in London, Stratford and on tour. The work ranged from fast-track projects to deliver stage machinery for specific productions in 8 weeks to large capital infrastructure projects such as powered flying systems and stage elevators (embedded C under OS9, Unix, LabVIEW, PLCs).
Led a multi-disciplinary team of electronics engineers, electricians and mechanical engineers and was directly responsible for ensuring that technical services met the requirements of the Licensing Authorities, Insurance Companies and the UK Health & Safety Executive. Managed both 'in-house' and Notified Body certification of stage machinery under the EC Machinery Directive.
Lectured to theatre industry groups on Health & Safety, Assessing Risks, European Work Equipment Regulations and Functional Safety of Control Systems.
Project responsibilities up to £1.5m
- 1982-1987 Background in instrumentation and high integrity real-time software for the medical diagnosis and industrial control fields:
1986-87 Member of Technical Staff, Integrated Micro Products, Consett
1985-86 Senior Computer Scientist, Freeman Hospital, Newcastle upon Tyne
1982-85 Medical Physicist, Freeman Hospital, Newcastle upon Tyne
- 1977-1982 B.Sc. (Hons), 2.1 Electronic Engineering
University College of North Wales, Bangor

General

Date of birth: 12 February 1961