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## Career Profile

Technical engineering and technology expert with extensive skills and experience in technical design, development, project installation and commissioning. Senior business manager with demonstrated skills providing project leadership across hardware and software application development. Recognised research and development specialist with published articles and industry based research.

## Key Competencies

- Strategic Planning
- Leadership and Mentoring
- Change Management
- Business Analysis
- Policy Development
- Visionary Leadership
- Project Management
- Research and Development

## Qualifications

**Honours Degree in Computer Science**  
Ballarat University

**Post Graduate Diploma in Electronic Computing**  
Bendigo College of Advanced Education

**Diploma of Electrical Engineering**  
Bendigo College of Advanced Education

## Key Achievements

- Successfully managed the commissioning of a news print mill.
- Successfully project managed the electrical design, installation and commissioning of a mini steel mill.
- Established and drove the success of an organisation that utilised a microprocessor based programmable controller. Developed a product across 3 generations that was utilised to control car washers, cement batching plants, mine winders, processors in the steel industry and capacitor switching in the power industry. Used function blocks joined together to perform complex and analogue control systems.
- Successfully developed an internationally recognised technical design organisation providing packhouse solutions. Drove hardware and software design as well as research to develop a unique product. Developed skills in Omron PLC's, SCADA systems, Ethernet backbone connecting PLC's, Ethernet IP utilised to control truck remote I/O's and multiple drives controlled using MODBUS.
- Successfully drove high volume projects providing project leadership and program management across a number of large scale technical and product development projects.
- Recognised advanced electronics and technical design expert. Personally developed a real time colour vision system and extensively involved and responsible for code design and development to support technical development of the system.
- Provided technical design and development as the research and development manager. This included undertaking extensive technical and industry based research to support strategic planning and the conceptualisation of product planning.

## Technical Skills

- Microprocessor control systems
- PLC development
- SCADA
- SQL
- AJAX
- MODBUS
- WS50 Dumb Terminals
- MC68000 Microprocessors
- FORTH, C, Coldfire Assembler
- PostgreSQL
- LINUX
- Windows NT/95/98/7/XP

- Programmable Controllers

## Employment History

**1987 – 2010**

**CVS**

*CVS Technologies are leading industry specialists in the development of technical sorting applications for use across various requirements within the fruit and vegetable farming industry. Established following a recognised opportunity to utilise colour recognition technology to advance rural farming, CVS was conceptualised and developed through personal interest and advanced technological skills in microprocessor technology and software development.*

Website: [www.cvs.com.au](http://www.cvs.com.au)

### **Positions Held:**

2010

*Project Leader*

2009 – 2010

*Technical Production Manager*

2007 – 2008

*Development Engineer*

2006

*Electrical Department Manager*

1987 – 2006

*Large Projects and Research and Development Manager*

*CVS as an organisation has matured substantially through meeting the demands and requirements of clients. As part owner and Director, responsibilities covered all aspects of product conceptualisation, design and development as well as strategic planning and corporate management.*

### **Lifeline of CVS:**

- *Initially established in 1990 using programmable video technology to sort fruit and vegetables. Proms were used to translate RGB colour into a colour space similar to HSI. RAM was used to convert the colour into readable data format which was a bit set of colour if matched to the operator pre-set sets. The initial application utilised a dumb terminal and the user interface was table driven with an interpreter used to generate the required screen images and input fields. Multiple microprocessor where used (MC68000).*
- *In 1992 the application was redeveloped to meet increased demand. Additional technology was introduced and hardware was designed to meet the requirements of an 8 lane sorting shed.*
- *In 1995 the algorithm was further developed to introduce the sorting of various fruits. Additional development occurred which allowed they system to support the sorting of products for sweetness, rot and blemish sorting. The increase of user friendly applications saw the introduction of a coloured front end with Ethernet links and various communication protocols that assisted in meeting support across multiple products and sorting methods.*
- *In 2001 CVS further advanced to start the development of an orange blemish sorter. The initial product was chosen based on it's uniformity in shape. Least squares were used to analyse and then generate a second order surface which represented the ideal product. Cluster of pixels that deviated from the surface were classified using neural nets.*

### **Key Responsibilities:**

- Provided end to end business management
- Drove high value projects providing program level leadership
- Conceptualised and designed technical product solutions
- Managed the strategic direction across various departments
- Represented the organisation as senior manager and visionary leader
- Led technical and non-technical teams managing recruitment and appointment
- Facilitated technical engineering and design as technical specialist
- Undertook extensive technical research to assist in solution design
- Programmed and coded to drive technical solution development

- Negotiated with key business stakeholders
- Liaised with business leaders during strategic partnership and business acquisition discussions
- Identified market opportunities and used these to drive strategic direction

#### **Achievements and competencies:**

- Conceptualised the business following previous success in microprocessor driven commercial technologies within AIE. Personally researched industry trends then requirements prior to developing the business scope and structure. Recruited technical specialists to support the development and design of the initial technology.
- Designed and developed initial products identifying the software and hardware requirements and worked extensively as the technical expert within a team of hardware and software professionals.
- Drove the end to end product development for the large complex projects. This development included key corporate accounts and required personal specialist expertise in programming of Omron PLC's, SCADA systems, Ethernet backbones connecting to PLC's, Ethernet IP's controlling remote input and output and the management of multiple devices through MODBUS.
- Maintained full responsibility for the development of a tomato blemish sorting system using existing CVS Technology.
- Personally managed and supported the hardware and software development teams. Provided mentoring and leadership through technical training, personnel management and drove design and development activities.

### **Early Career Positions**

**1982 – 1987**

Research and Development Manager  
AIE

#### **Key Achievements:**

- Led the development team and drove the development of technical design for major complex projects.
- Facilitated feasibility and benchmarking activities to assist in developing the core fundamentals of the products.
- Successfully project managed and led product development projects.

**1979 - 1982**

Commissioning Engineer, Project Engineer, Software Development Manager  
ASEA

#### **Key Achievements:**

- Drove the project management for key technical projects, including project managed the team responsible for commissioning the Albury Paper Mill.
- Designed and managed the software development team then assisted in the facilitation of the commissioning of the Smorgans Mini Steel Mill. International appointments during this time included a 6 month appointment to Sweden to develop software and an awareness of technical requirements.
- Appointed as service engineer to the team responsible for commissioning a Sheet Steel Plating Line in South Korea. This included a 6 month relocation to South Korea.

### **Professional References**

***Available upon request.***