

Profile

Over eighteen years of computer and systems engineering experience, with a wide range of programming ranging from microcode through c++ on platforms from a lean real-time kernel through Windows, Unix and Linux, significant hardware design accomplishments, and over fifteen years of business management experience.

Experience (Reverse Chronological)

Analysis

- PSF estimation and deconvolution for noisy, motion degraded digital video ([Mathematica](#)). [22]
- Design and modeling of a real time storage resource scheduling algorithm (*Mathematica*). [18]
- Conversion of computational scripts for telescope mirror figure control. [15]
- Technical study for next generation operational image display and handling. [9]
- Characterization of custom CRT monitors including measurements and analysis. [8]
- Statistical modeling for sizing of a digital map production system. [4]

Software

- Coding of a Windows database application, general network and computer support. [21]
- Coding of an intranet web application for property control with SQL backend on server (CSS, JS,HTML). [20]
- Preparation and testing of a system installation CD consisting of a modified Linux distribution, application installation scripts (Perl, Bash), etc. [17]
- Software design, code and test for a real-time video server, including a modified XML parser, a socket communications library, and real-time control algorithms (C). [16]
- Coding of a custom Solaris I/O driver for a VME fiber optic ring (C) [14]
- General problem identification and solution for telescope sensor control. (C) [13]
- Design and implementation of multiple command servers and an executive client for telescope operator video display (C++). [12]
- Real-time control for a custom image processing system (C and M68010 assembler) [3]

Hardware

- Bus architecture and hardware design for a packet switch [7]
- Design of the high speed parallel I/O channel for C-1 and C-2 supercomputers [6]
- Design of a special purpose microcoded control processor [1]

General

- Market study, finance models, business planning, financing procurement, construction oversight, business start-up and management. [11]
- Supervisor for development of a multiprocessor image processing engine (Staff of 4). [10]
- Supervisor for hardware and embedded software development for an image processing workstation (staff of 27). [9]
- System Engineering work and cost volume responsibility for successful acquisition of a 260M\$ (1985\$) development program. [5]
- Large scale system integration support on and off site. [2]

History

Principal	DT Software Engineering	Aug '06 – Present
Engineer Scientist IV	Boeing LTS Maui	Feb '03 – Aug '06
Owner	Maui Oil Change & Tune-Up	Feb '94 – Present
Sr. Engineering Specialist	E-Systems Inc., Garland, TX	Jan '88 – May '93
Principal Engineer	Cygnus Computer, Dallas, TX	Aug '87 – Dec '87
Sr. Design Engineer	Convex Computer Corp., Richardson, TX	Jun '85 – Jul '87
Entry – Sr. Electronic Systems Engineer	E-Systems Inc., Garland, TX	Jun '80 – May '85
University of Illinois BS Computer Engineering	Urbana, IL	Dec '79

