Larry Colen

home: 831-335-7505 **pager:** 408-697-8377
e-mail: lrc@netcom.com **url:** www.racer.net/lrc

EXPERIENCE OVERVIEW:

System design:	Design of complete system, both hardware and software.
Software:	Design, writing, debugging, documentation and maintenance.
Hardware:	Design, debugging, field service and component specification.
Real-time control:	Wrote software to control industrial systems in real time.
User interfaces:	Designed and wrote user interfaces.
Data acquisition:	Realtime acquisition of data on industrial systems.
Signal analysis:	Realtime analysis of digitized analog signals.
Technical writing:	Wrote user manuals and a textbook on performance driving.
Teaching:	Programming, rock climbing and performance driving.
Project management:	Responsibility for the work of myself and others.
Software quality:	Training in techniques and methodology of software quality.
Distributed computing:	Multiprocessor systems where each processor performed different tasks.
Inter-processor communication:	Communication between processors in multiprocessor systems.
Languages:	C (ten years), Pascal, FORTRAN, BASIC

several Assembly Languages including:
MIPS, Intel 8080, Zilog Z-80, Hitachi HD64180, Dec PDP-11 and TI TMS320.

EDUCATION: B.S. Electrical and Computer Engineering

University of California at Davis, 1983
Emphasis: Software and signal processing.
Sr. Project: Multi-processor operating system.

University of California at Santa Cruz, 1977-1978
Completed coursework while a senior in high school.

EXPERIENCE:

Feb 1998 - Sept 1998 Engineer Packet Link Inc., San Jose CA

Duties: Packet Link was a startup developing an intelligent Wide Area Networking chip.
As at most startups, my duties were to do what needs doing. As a member of the Firmware and Architecture department most of my work involved learning WAN protocols and writing experimental software to determine the performance of our chip at various tasks. I was also involved in writing Linux Device Drivers, Technical writing (mostly specs and tutorials), the company Software Quality Process and Software Standards, and System architectural review.

Feb 1996 - Aug 1997 Sr. Software Engineer at Schlumberger ATE, San Jose CA

Duties: Writing calibration and diagnostic software for a SPARC based, mixed signal IC Tester.

May - Sept 1995 Contract Programmer at Atalla Corp, San Jose CA

Projects:
Point of Sale Terminal: Updated existing software to work on new hardware platform.

Automated Teller Card Programmer: Updated existing software to work on new hardware platform. This system used cryptographic protocols to insure secure transmission and confirmation of personal identification numbers.

Larry Colen e-mail: lrc@netcom.com home:831-335-7505

1992 - 1995 Software Engineer at Edge Diagnostic Systems, Sunnyvale CA

Projects:

Ignition analyzer: This system involved an Intel based machine running the user interface that communicated with a 32 bit processor which would collect, analyze and process the data. Developed the software for collecting the data, analyzing it for the location, frequency, magnitude and duration of the ignition events as well as processing the data for display and communicating with the front end machine. Developed the software for machine to communicate with the signal processor and maintained the user interface.

1983 - 1992 Engineer at Digital Dynamics Inc., Scotts Valley CA.

Projects:

Automated test system for a single board embedded controller. Designed the hardware, both mechanical and electrical, for calibrating and testing both digital and analog circuitry. Designed, wrote and debugged the test and calibration software for both the test system and the computer being tested. Supervised the technician who built and debugged the hardware of the test system. Analysis showed that the automated test system paid itself off in time saved over manual test after one hundred units of a several hundred unit production run.

Controller for industrial glue machine. Designed user interface for controlling a fourteen channel Hot Melt Adhesive Supply Unit via a twenty key keypad and a two line by sixteen character display. Developed a graphical method of explicitly describing the user interface to a computer-naive customer. The system had three levels of user access with separate passwords, individually settable temperatures, time delays and standby setpoints. Wrote the real-time executive and temperature control software in assembly. Wrote the user interface, calibration and alarm software in Control Basic. Helped bring up and debug the new hardware.

Enhancement of controller for industrial glue machine. Converted the code from BASIC to C. Wrote routines to target commercial cross-compilers (one on CP/M, one on MS-DOS) to the hardware. Wrote code to implement timer control and scheduling. Wrote code to emulate the hardware on a PC for debugging the user interface. The system was also accessible via a serial port for remote control by another computer.

Several Air-Flow Monitoring systems. Project management, user interface design and coding for the software of a computer controlled industrial airflow monitoring system.

Gas pipeline leak detection software. Improved an algorithm for detecting leaks by analyzing the realtime signals from a natural gas pipeline.

Temperature Data Loggers. Wrote the user manual for a temperature data logging system which used a PC to read data out of data loggers which took temperature readings at specified time periods.

OTHER INTERESTS:

Owner and operator of Redforest, a semi-public access UUCP site, originally running on SCO Xenix, now running Linux.

In addition to my computer related skills, I have written the textbook used by the National Auto Sport Association in their performance driving school, taught performance driving for seven years and have been active in road racing as driver, crew and flagger for ten years.