

# John Golini

*Principal Consultant*

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## Summary of Experience

30+ years experience in computer systems architecture, systems programming, software design, hardware design, and applications programming. Independent consultant-programmer since 1982.

Currently specializing in Embedded Controller Applications.

Have written:

- operating systems
- real-time controllers
- device firmware
- usb devices
- communications subsystems
- terminal emulators
- device drivers
- hardware diagnostics, manufacturing tests
- system utilities
- software development tools

## Interests and Strengths

Especially good at software-hardware interfaces. Can read hardware schematics and do some hardware debugging. Does exceptionally well working with hardware engineers in bringing up new hardware and PC board systems.

Interested in working with a diversity of microprocessors and embedded microcontrollers. Has exceptional strength in learning new processors, software/firmware development systems, debugging aids, ICEs, etc..

GUARANTEED fast, error-free work with no "loose ends" left untied.

Prefers to do majority of work off site in own office/lab. Will do on-site work as required. Facilities include Windows 2000 PC development system with many development and documentation tools as well as special-purpose hardware interface equipment.

## Areas of Proficiency

### Processors

Intel MCS-51/8051/8052/8031/8032  
Philips 80C51/80C552  
Microchip PIC-16Cxxx  
Zilog Z8/Z80/Z8000  
Generic 6502/65816  
Intel 8086/8088  
Intel 8080  
Atmel AT80Cxx  
Dallas DS80Cx20  
Motorola 65xx/68xx  
Motorola 68xxx  
Motorola 68HC11/05  
Texas Instruments TI 50C1x/3x  
Cypress CY7C63xxx  
Cypress/Anchor EZ-USB

### Languages/Tools

C  
Assembler  
JavaScript  
VISUAL BASIC  
FORTRAN  
PASCAL  
TAWK  
  
VHDL  
ORCAD  
CUPL

## Consulting/Contracting Experience

### **Digital Display Systems, Sunnyvale CA**

**November 1992 - Present**

Specialized Digital Clocks (4)	PIC	Assembly and C
Specialized Digital Clocks (about 200 products)	8051	C

### **MicroSystems Development Technologies, Inc., San Jose, CA**

**May 1986 - Present**

Toy (Fisher-Price Powertouch) Keyboard Emulator	8051	C
High intensity lamp controller	8051	C
Audio processing tools	8086	C
Customized USB Device	Anchor/8086	Assembly, C
Customized USB Devices (3)	CY7C63xxx/8086	Assembly, C
In-circuit emulator for PIC	PIC/8086	Orcad, Assembly, C
Assembler for Custom Microcontroller	8086	TAWK
Specialized LCD Controller	PIC	C
Digital Telephone (E1/T1) Call Monitor	8051	C
Talking Toys (about 6)	TI50C10	Assembly
Optical Code Reader (Toy)	TI50C10	Assembly
Infrared Remote Power Controller	8051	C
Toy Tester	PIC	Assembly
Disassembler	68000	ADA
Digitized Speech Processing	TI50C10	Assembly
Video Game Analyses	68000, 6502	Assembly
Generic 68HC11 Card	68HC11	Orcad, CUPL
PC Port Diagnostic Software	8086	C
HC11 Based Remote Control	68HC11	C
Special Purpose Logic Analyzer	68000	C
Mechanical IC Lead Tester	8051	C
PC Communications	8086	C
In-circuit EPROM emulator	8086	C, Assembly, Orcad
File Transfer System	8086	C, Assembly
Optical Mouse Diagnostics	6502/816	C
Coin-Op Control Firmware	Z80	Assembly
Real-time Toy Emulation	8051	Basic

<b>DeVaSys Embedded Systems</b> High-speed data transfer functions for USB firmware	Anchor/8051	Assembly	<b>Nov. 2003</b>
<b>Phaethon Communications, Inc., Fremont, CA</b> Fibre Optic tranceiver controller hardware and firmware	68HC11	Orcad/C	<b>Nov. 2000 – Feb. 2001</b>
<b>Adaptec, Inc., Milpitas CA</b> Multiple-board stress-test platform	8086	C, Assembly	<b>March 1999 – Feb. 2000</b>
<b>Bell Sports, Inc., San Jose CA</b> Bicycle Headlamp Controller	PIC	Orcad/Assembly	<b>June 1998 – Aug. 1998</b>
<b>Cimarusti &amp; Associates, Torrance CA</b> Text parsing utilities	8086	C	<b>July 1992 – Oct. 1997</b>
<b>Tencor Instruments, Inc., Palo Alto, CA</b> Hardware Diagnostic Language Implementation	8086	C	<b>Oct. 1994 – March 1997</b>
<b>University of California Berkeley</b> Instructor in 8051 Microcontroller Course	8051	Assembly	<b>Feb. 1994 - Nov. 1994</b>
<b>C-COR/COMLUX Inc., Fremont, CA</b> Digitally Controlled Video/Audio Coder/Decoder Manufacturing Test Software Digitally Controlled Video Selector Embedded Controller Communications	80552 8086 8051 8086,8051	C C C C, Assembly	<b>February 1990 – Sept. 1994</b>
<b>Quest Technologies, Inc., Sunnyvale, CA</b> Motorized Wheelchair Software	8051	C, Assembly	<b>February 1991 - March 1992</b>
<b>Advanced Computer Controls, San Jose, CA</b> Embedded Controller Software	68HC11	C, Assembly	<b>January 1990 - March 1992</b>
<b>FROX, Inc., Sunnyvale, CA</b> Embedded Controller Software Embedded Controller Software	8051 8051	Assembly Assembly	<b>June 1990 - December 1991</b>
<b>NetFRAME Systems, Inc., Sunnyvale, CA</b> Network Demonstration Software System Overview Documentation	8086 -	C MS Word	<b>April 1989 - September 1989</b>
<b>Computer Consoles, Inc., Irvine CA</b> VT-100 Terminal Emulator	Z80	Assembly	<b>Feb. 1988 - July 1988</b>
<b>Logical Services Inc., Santa Clara, CA</b> Video Graphics Display Card Microcontrolled Wheelchair Telecom/Audio System Architecture Real-time Communications	68000 8051 - 8051 & 8086	Assembly Assembly, C MS Word C, Assembly	<b>May 1986 - July 1989</b>
<b>Eurosoft International, Inc., Saratoga, CA</b> Graphics Terminal Emulation	8086	C	<b>May 1986 - Jan 1987</b>
<b>Entrack Corp., Belmont CA</b> Audio Editing Systems Design	-	MS Word	<b>May 1986 - Sep 1986</b>
<b>ImageSet Corp., San Francisco, CA</b> Graphics Software Development	8086	C	<b>May 1984 - Jun 1986</b>

<b>Marcella's Travel Agency, San Jose, CA</b>		<b>Jan 1985</b>
System Setup and Training	-	DOS
<b>GEJ Publishing, Inc., Sunnyvale, CA</b>		<b>Apr 1984- May 1985</b>
Diskette Format Analysis	-	MS Word
Software Development	8086	C
<b>Solo Systems, Inc., Santa Clara, CA</b>		<b>Feb-Mar 1983</b>
Specification Development	-	MS Word
<b>Olivetti Advanced Technology Center, Inc., Cupertino CA</b>		<b>Jan 1984 - Mar 1984</b>
MS-DOS - CP/M Software Development	Z80	Assembly
UNIX Software Development	PDP/11	C
Architecture Analysis	-	MS Word
Specification Development	-	MS Word
MS-DOS - CP/M Software Development	8086, Z80	Assembly
<b>Businessland, Inc., San Jose, CA</b>		<b>Nov 1982 - Mar 1983</b>
MS-DOS Software Development	8086	Basic, C, Assembly
<b>Santa Clara Office Equipment, Santa Clara, CA</b>		<b>Dec 1982</b>
DBase II Software Development	8086	DBASE-II

Employment Experience

<b>Olivetti Advanced Technology Center, Inc., Cupertino, CA</b>	
Personal Computer Systems Architect	Dec 1981 - Sep 1982
Supervisor of Software Development	Jan 1981 - Nov 1981
Supervised 3 programmers.	
<b>BBN Computer Corporation, Cambridge, MA</b>	
Computer Scientist	Feb 1980 - Dec 1980
<b>Wang Labs., Inc., Lowell MA</b>	
Manager of Software Development	Jul 1976 - Jan 1980
Supervised 8 programmers.	
<b>American Systems, Inc., Watertown, MA</b>	
Project Manager	Mar 1975 - Jun 1976
<b>New Mexico Institute of Mining and Technology, Socorro, NM</b>	
Systems Programmer	Apr 1973 - Feb 1975
<b>Clarkson College, Potsdam, NY</b>	
System and Applications Programmer	Jun 1971 - Mar 1973

Patents

United States Patent 5,274,311,  
December 28, 1993,  
Littlejohn, et al. "Control System Network Structure"  
<http://patft.uspto.gov/netacgi/nph-Parser?Sect2=PTO1&Sect2=HITOFF&p=1&u=%2Fnetahtml%2Fsearch-bool.html&r=1&f=G&l=50&d=PALL&RefSrch=yes&Query=PN%2F5274311>

Education

3 Years study in Chemistry, 1967-1970

Clarkson College of Technology, Potsdam, NY

B. A. Computer Science, 1971

State University of New York, Potsdam, NY

Professional References

*Available Upon Request*