Chuck Harrison Seattle, WA 98108

5100

Resumé

Summary:

Experienced engineer with exceptionally broad multidisciplinary design background. Excellent creative insight into systems-level issues. Strong prototyping, debugging, and bench instrumentation skills.

Work Experience

7/95 – present: Engineering Consultant (Adelphi, MD; Snohomish, WA; Seattle WA) Disciplines:

Digital circuits, analog circuits, microcontroller programming, FPGAs, laser optics, optomechanics, electromechanical design, temperature controls, servosystems, flatpanel LCD displays, pulse power instrumentation, color science, 3D modeling, writing of industry standards, cryptography, avionics, electron microscope service.

Contract consulting to a variety of companies.

9/87 – 6/95: Engineer, HIAC/ROYCO (Silver Spring, MD)

(Manufacturer of laser-based industrial particle measurement devices, subsequently acquired by Hach) Disciplines:

Analog circuits, A/D interface, laser optical systems, mechanical design, fluid flow, thermodynamics, statistics, mathematical modeling.

Research & development, instrument design, prototype debug, manufacturing support, customer applications support.

6/78 – 7/87: Chief Engineer, Associates & Ferren (Wainscott, NY)

(Manufacturer of custom equipment for theatrical and movie effects; subsequently acquired by Walt Disney) Disciplines:

Digital circuits, analog circuits, audio, video, electromechanical servosystems, precision mechanisms, machine shop work, pneumatics, servohydraulics, computer programming, optics.

"One-off" system design, construction, test, installation. Project planning, staff supervision.

2/75 – 6/78: Design Engineer, Damon/IEC (Needham Heights, MA)

(Manufacturer of centrifuges and medical instruments, subsequently acquired by Thermo Scientific) Disciplines:

Analog circuits, digital circuits, motor speed control, motor manufacturing, temperature control, vacuum systems, vibration analysis.

New product development, manufacturing support.

Education/Professional

BSEE, 1974, MIT (Cambridge, MA).

6 U.S. Patents for electronic, mechanical, and optical inventions.

Academy Science/Engineering award ("Oscar") for computerized optical printer (1986).

<u>Skills</u>

Experienced in analog and digital circuit design using several schematic-capture and PClayout programs. FPGA programming with VHDL. Computer programming (assemblers, C, Labview, other languages). Mechanical design with 2D/3D CAD. Familiar with a wide range of electronic, mechanical, and optical assembly and test equipment; able to assemble prototypes and debug challenging problems to the component level. Clear and accurate technical writing. Highly cooperative attitude.