

ROGER N. SAMDAHL

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A senior level engineer with responsibility for new product design and development. Experience includes design of analog and digital systems, firmware and software development, and all aspects of project and departmental management.

2002-Present **Independent Consultant**

Specializing in development of wireless communication systems. Clients included:

WhereNet Corporation (2004-2008)
DashJack Corporation (2004-2005)
Siren Corporation (2007)

Projects included:

802.11 & 802.16 based communication devices
Infrared based wireless systems
Magnetically coupled wireless control systems
Consumer audio equipment based on the iPod player.
Digital filter systems
RFID tracking and locating systems
Consumer audio remote speaker systems

1997-2002 **NETSCHOOLS CORPORATION, Santa Clara**

Director of EduLan Development (2001-2002)

Designed a computer system for '1:1 E- Learning' based on 802.11 wireless hardware. NetSchools provides the network infrastructure, servers, gateways and laptops on a school wide or district wide basis.

Director of Hardware Development (1997-2001)

Designed a wireless networking system for NetSchool's line of StudyPro laptop computers. Intended strictly for K-12 schools, the StudyPro computer is typically deployed to all the students in a school or at least a complete grade level within a school. The StudyPro is a ruggedized laptop that provides 4 Mbps wireless access between the 30 students in a typical classroom and a school's infrastructure and Internet gateway.

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- 1996-2000 **OAKVALLEY DEVELOPMENT, San Jose**
Consultant
Provided product design and program management to several Silicon Valley companies. Projects included embedded code development for high volume electronic tools, development and construction of tests systems for a volume manufacturer of set-top cable and satellite boxes, and design of infrared communication systems.
- 1991-95 **PHOTONICS CORPORATION, San Jose**
Vice President of Research and Development
Designed a line of wireless networking transceivers using diffuse infrared as a communication medium. The product line included ISA and PCMCIA adapters for PC and Macintosh products along with associated drivers to support Netware, Microsoft Network, Lantastic and other network operating systems. Tasks included development of several analog and digital ASICs. Chaired the IEEE effort to develop a draft standard for wireless IR networking. Managed a group of twenty engineers and technicians and several consulting engineers. Products were licensed by IBM and others for OEM distribution.
- 1988-90 **CHAPARRAL COMMUNICATIONS, INCORPORATED, San Jose**
Vice President, Home Electronics Group
Developed satellite television receivers for high-end consumer applications. These products incorporated multiple embedded microprocessors, LCD and on-screen graphic displays, digital video processing, RF, video and audio channels. Responsibilities included both development engineering and product marketing with a team of sixteen professionals. Designed and introduced seven new satellite receiver systems during an eighteen month interval. Also restructured engineering activities to support multiple in-house projects with minimal consultant involvement.
- 1986-87 **PINDAR DEVELOPMENT CORPORATION, Sunnyvale**
Vice President of Engineering
Developed a large screen video projection system for business information displays. The projector was a three channel light valve device with computer controlled image alignment. Required technologies included microprocessor based instrument control systems, mechanical design of low cost, rigid optical structures, thin film deposition, sputtering and liquid crystal cell fabrication. Managed an RD&E organization of nineteen professionals, which designed, built and demonstrated a prototype projector under a development contract with Kodak Corporation. The schedule for this project was very compressed and was completed within a limited available budget.
- 1982-86 **MacLEOD LABORATORIES, INCORPORATED, San Jose**
Vice President of Engineering
Developed a digital communication system for bi-directional control and data transmission between an oil well drill bit and a surface instrument package. Managed a group of thirty professionals charged with the definition, design and testing of a

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variety of sensors, digital processing electronics, ultra low frequency communication devices, and mechanical packaging for an extremely hostile environment. Organized and managed purchasing and documentation functions to support long term engineering projects. This was a 4 year, \$11 million research and engineering program that resulted in the development of two generations of Measurement-While-Drilling products based on a proprietary communication technology.

In 1991, MacLeod Laboratories was sold to Protechnics International, a Houston based company specializing in underground measurements services. Protechnics continues to use the MacLeod communication system in a variety of underground measurement devices.

1978-82

FINNIGAN CORPORATION, San Jose

Engineering Manager developing computerized Gas Chromatograph/Mass Spectrometers systems.

1974-78

SYNTEX CORPORATION, Cupertino

Electronic Design Engineer and **Engineering Manager** developing Computerized Axial Tomographic medical xray systems and other scientific instruments.

1966-74

VARIAN ASSOCIATES, Palo Alto

Electronic Design Engineer and **Project Manager** designing Nuclear Magnetic Resonance spectrometer systems.

Education:

BA Physics - University of California, Riverside

MS Physics - San Jose State University

Affiliations:

American Institute of Physics

IEEE, Computer Society