

Lee Felsenstein

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Position: Senior Electrical Engineer

Summary:

Skilled electronic design engineer in various disciplines and an effective leader of small development teams. Strong experience in successful electronic product design and development.

Work most effectively across interface between marketing product development and engineering, continuing into manufacturing transfer. Capable of handling tasks across multiple disciplines.

- Excellent conceptual design skills, both individually and leading groups
- Multiple engineering skills including every stage of hardware design process
- Entrepreneurial experience
- Familiarity with bringing designs to production, including handling mechanical and plastics issues
- Intellectual property planning and management experience

Accomplishments:

Opened emerging markets through design of ten products in the computer area, of which eight reached the market and five embodied major advances in the field. Examples include:

- Designed several early personal computer products
- Defined the architecture of personal computer displays
- Designed first commercial portable computer
- Designed plasma-panel IBM compatible display adapter – enabled design win for panel manufacturer.

Broad experience with electronic design:

- ◆ Analog circuit design, including active filters.
- ◆ Digital circuit design – CMOS, ECL, TTL, microprocessors.
- ◆ System design and module definition – hands-on debugging.
- ◆ Circuit board layout, fabrication, parts procurement and assembly.
- ◆ Assembler software for various microcontrollers and minicomputers.
- ◆ Signal integrity, EMI and ESD elimination, agency approval testing, DFM.
- ◆ Intellectual property management experience – 13 patents granted
- ◆ Startup experience, team management, technical communication.

History:

Chief Design Engineer

Fonly LLC, Palo Alto CA 2005 – present

- Provided electronics engineering capability for startup hearing aid company. Invented new method for audio power transmission. Performed design of hearing aid electronics, laid out prototype PC boards, managed assembly, participated in design discussions. For EarLens Corp., Redwood City CA, 2008 – 2009.
- Designed and built electronics for instrumenting a solar steam power generation system. Devices included a networked (RS-485) input/output board and a state-machine valve sequencer. For Terrajoule, Redwood City CA, 2011 - 2012
- Designed, laid out, built and debugged electronics for iPad game attachment. Worked closely with industrial designer to determine dimensional constraints and wrote machine-language test code to verify performance. For AK Associates, Sunnyvale CA, 2012
- Designed exerciser system for military electronic controller CPU (TOW missile – 1980 vintage). Reverse engineered schematics, designed test circuitry, laid out PCB, purchased parts and assembled units. Subcontracted software development and worked closely with contractors to debug system and ensure functionality. For Data Science, El Cajon CA. 2010
- Redesigned mechanics and electronics for pharmaceutical piston extruder, adding embedded computer for data-logging capability. For Talima Therapeutics, Santa Clara CA, 2007.

Senior Electrical Engineer

Pemstar Pacific Consultants, San Jose CA 2001 – 2005

- Designed electronics of handheld infant hearing screener. Combined digital and analog sections of two designs, designed five circuit boards, laid out two boards. Managed emissions testing, performed Failure Mode Engineering Analysis. For Natus Inc., San Carlos CA 2002 – 2003
- Handled all electrical issues in taking a new tablet computer docking station through agency testing into full production. Solved difficult ESD problem through innovative printed circuit design. Managed emissions and mechanical testing. Stepped in to replace an engineer who resigned. For Motion Computer, 2005
- Developed ultrasonic method for location of implanted injection ports. Worked with suppliers to develop custom transducers, designed electronics for drive and sensing. Performed and documented extensive tests. For Inamed, Santa Barbara, 2004

Researcher

Interval Research Corp. Palo Alto CA 1992 – 2000

- Led the engineering effort at Microsoft co-founder Paul Allen's research and development company. Managed the rapid-prototyping group. Designed analog, video and digital circuitry to assist research projects.
- Chaired Intellectual Property Committee.
- Served as engineering liaison to spinoff game company. Performed transfer of licensed location/identification technology, designed serial interface and managed prototype build for demo system resulting in 100% reliability during crucial marketing phase. Product launched successfully and company sold to Lego. Proposed and wrote patent on improvements to assist strategy of negotiations.

Founder & President

Goleemics, Inc. Berkeley CA 1979 – 1992

- Assembled and led technical teams in small contract electronic design firm as required to complete 50 jobs. Successfully managed \$800,000 contract to design IBM-compatible prototype PC. Clients included Oki Electric LTD, Ricoh, Britton-Lee, Ricoh, Berkeley Speech Technology among others. 1983 – 1992.

VP Engineering, R&D Fellow

Osborne Computer Corporation Hayward CA 1981 – 1983

- Designed the initial product, supported the product design into manufacturing, performed architectural design and prototyping of the follow-on product.
- Evaluated technologies for future models.
- Brought a third-party PC-compatible design in-house.
- Handled negotiations with several Japanese companies in developing a laptop design.

Pro Bono:

Designer, "Remote Village IT System"

Jhai Foundation (2001 - 2003). Defined, specified, designed and constructed weather-proof rugged ICT system for VOIP use in jungle environment. This effort started an ongoing industry of systems designed for developing-country rural usage

<www.inveneo.org>

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Education:

BSEE - University of California at Berkeley

General curriculum in Electrical Engineering – courses included mechanical engineering,

properties of materials, servomechanisms, fields and waves, introductory surveying.

Communication Skills:

- Excellent written and verbal communications skills – served as editor of a computer magazine bridging the popular and technical markets.
- Good public speaker, frequently invited to speak on computer history.
- Author of several articles

Awards:

- Pioneer of the Electronic Frontier – 1994, Electronic Frontier Foundation
- Laureate, Tech Museum of Innovation – 2003, Tech Museum of Innovation
- Editor's Choice – Awards for Creative Excellence, - 2007, EE Times magazine