



Kenneth S. Kundert

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EXPERIENCE

Designer's Guide Consulting, Inc., Los Altos, CA, President, 2005-present. Provide high-value consulting services to IC design and EDA companies. Help clients move to top-down design and top-down verification methodologies. Improve clients' verification capabilities by providing simulation, modeling, and analysis expertise.

Cadence Design Systems, San Jose, CA, 1989 — 2005. Fellow in the Office of the CTO. Guided the development of mixed-signal simulation products. Developed, and led the development, of advanced technology in the areas of circuit simulation. Created the Spectre and SpectreRF circuit simulators and the Verilog-A hardware description language. Participated in the development of Verilog-A, Verilog-AMS, and VHDL-AMS languages and language standards.

Hewlett-Packard, Santa Rosa, CA, 1983 — 1989. Research Fellow for the Network Measurements Division. Developed core algorithms and code base for *HP85150b* (MNS) microwave harmonic balance circuit simulator while on site at U. C. Berkeley. MNS is simulator that powers Agilent's ADS microwave and RF design environment.

Hewlett-Packard, Santa Rosa, CA, 1979 — 1983. Design engineer for the Network Measurements Division. Designed portions of the *HP8510* microwave network analyzer. Design work involved high performance RF and analog circuitry.

Tektronix, Beaverton, OR, 1978. System engineer intern at the Service Instruments Division for the 233x family of portable 100 MHz oscilloscopes.

Tektronix, Beaverton, OR, 1977. Design engineer intern for the Service Instruments Division. Developed portions of the 233x family of portable 100 MHz oscilloscopes.

EDUCATION

- Ph.D. in Electrical Engineering and Computer Science, UC Berkeley, 1989.
Dissertation: *Steady-State Methods for Simulating Analog Circuits*.
Advisor: Alberto Sangiovanni-Vincentelli
Also created the *Sparse* linear equation solver and the *Spectre* circuit simulator.
- M. Eng. in Electrical Engineering and Computer Science, UC Berkeley, 1983.
Thesis: *A Switched-Capacitor Synchronous Detector*
Advisor: Robert G. Meyer
- B. S. in Electrical Engineering and Computer Science, UC Berkeley, 1979.

PATENTS and PUBLICATIONS

- Awarded 11 U.S. patents
- Authored 3 books and 35 refereed technical papers
- Created www.designers-guide.org website and community for circuit designers

BASIC SKILLS

- Deep understanding of circuit simulation, including its capabilities and limitations
- Knowledge of the operating principles of common analog, RF, and mixed-signal circuits
- Ability to model and an understanding of modeling fundamentals
- Facility with mathematics, statistics and stochastic processes

References and complete C.V. available on request.