

**DAVID A. BUTLER, Curriculum Vitae**  
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## **EXPERIENCE**

### **Owner/President**

2009 – current     Optimal Building Systems LLC, Sierra Vista, Arizona  
Provide load calculations and HVAC design services for high performance homes.

### **Project Manager, HVAC Services**

2005 – 2008        Environmental Building Solutions, Charlotte, North Carolina  
Provided load calculations and HVAC design services for Energy Star builder partners. Also performed HERS ratings for Energy Star certification. Responsible for HVAC training at EBS.

### **Owner/Consultant**

1985 – 2009        Residential Micro Systems

- Provided research and product development services to a variety of clients with primary focus on integrated home systems, advanced energy management strategies, evolving home networking standards, and human factors. Partial list of corporate clients: Square D, General Electric, Electricite de France, Egis Sarl, Smart House Ltd, NorTel, Arvida Disney.
- Long-standing and active member of the Consumer Electronics Bus (CEBus) standards committee (1985 – 1992). Oversaw design and implementation of a major demonstration booth at several Consumer Electronics Shows.
- Produced *At Home With Technology*, a popular nationally syndicated weekly newspaper column that appeared in four-dozen newspapers including Atlanta Journal & Constitution, San Jose Mercury News and The Cleveland Plain Dealer. Topics included home security, energy management, home automation, environmental control, and whole-house audio-video. During column's 5-year run (1992–1997), employed small research and admin staff.
- Published numerous magazine and journal articles on evolving home automation industry, communication standards, energy management, and user interface issues.
- Designed/engineered/built former residence as a laboratory for advanced home systems research, personally supervising all aspects of project. Included provisions for sub-metering and flexible wiring paths to support various monitoring and control projects. Conducted extensive building science research prior to designing thermal envelope, wall system and one-of-a-kind zoned HVAC system. Familiar with ACCA Manuals J/D/S, and Energy-10 building simulation software, which supports daylighting and other passive solar strategies.

### **Senior Building Systems Engineer, Research & Development Team**

2001 – 2003        Enalays Corporation, Calexico, California

Assisted Chief Technology Officer of dynamic start-up company, taking on a wide variety of technical projects:

- responsible for application of psychrometric principals throughout product line
- served as company's senior energy analyst
- led effort to redesign eScan™ laptop software; managed subsequent field testing program
- conducted proof-of-concept research for a residential gateway project
- developed rationale for minimizing the number of sensors required to monitor health of unitary air conditioning systems (e.g., continuous commissioning)
- wrote winning proposal for Small Business Innovation Research grant under the DoE
- served as liaison to company's research partners, including Oak Ridge National Labs
- led effort to develop new test bed concept to validate performance of airflow hoods

- served as liaison to customers (HVAC contractors) to assist product development effort
- responsible for technical content of company's training curriculum and product literature
- conducted directed research and wrote numerous technical briefs for senior management

Enalays develops and manufactures leading-edge diagnostic tools and processes for residential and light commercial HVAC contractors. eScan, the company's flagship product, consists of a laptop computer and a network of wireless sensors and airflow hoods designed to measure system performance in-situ, in real time. eScan is marketed in partnership with Honeywell.

### **Production Planning & Materials Management**

1975 – 1982      Blue Bell, Inc. and Springs Mills, Inc. (NC, SC, and Puerto Rico)

Held various positions in manufacturing management in the apparel industry, advancing to Director of Production Planning and Materials Management at the Mayaguez, Puerto Rico Division of Blue Bell (later merged with VF Corp). Managed large staff responsible for production schedules, work orders and purchasing for seven factories producing in excess of 12 million Wrangler jeans per year. Also worked in Greensboro and Sanford (NC) divisions of Blue Bell, interrupted in 1978 by a one-year stint with Springs Mills in Lancaster, SC.

## **EDUCATION**

### **Master of Science, Electrical & Computer Engineering**

1982 – 1984      North Carolina State University, Raleigh, NC

Major emphasis in digital design and communications theory; minor in software systems engineering; graduated top of class

### **Bachelor of Science, Business Administration**

1970 – 1974      University of North Carolina, Chapel Hill, NC

Major emphasis in production management with minor emphasis in cost accounting; worked part time throughout college; graduated Phi Beta Kappa

## **NOTABLE PROFESSIONAL ACTIVITIES & HONORS**

- associate member, American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) since 2001
- member, Consumer Electronics Bus (CEBus) Standards Committee of the Consumer Electronics Manufacturers Association (CEMA, formerly EIA), 1985 – 1993
- charter member of the Home Automation & Networking Association (HANA), 1988
- technical writer and consultant for Pathfinder - Strategies for Intelligent Products and Services for the Home, Parks Associates, 1988 – 1989
- keynote speaker, DOMOTIQUE 88 - First International Conference on Intelligent Homes, Paris, France, January 1988
- columnist for Electronic House Magazine, EH Publishing, 1985 – 1987
- CFPIM (fellow), American Production And Inventory Control Society, 1985
- honorary societies: Phi Eta Sigma (1971); Phi Beta Kappa (1973); Eta Kappa Nu (1984); Tau Beta Pi (1984); Phi Kappa Phi (1984); Upsilon Pi Epsilon (1984)