

# Richard D. Filley

## EDUCATION

*BS Industrial Engineering*, December, 1978, University of Washington, Seattle, Washington  
*MBA Studies*, Arizona State University, Tempe, Arizona

## UNIVERSITY AND NON-PROFIT EXPERIENCE

**University Rank and Status:** *Academic Professional, with full rank and continuing (tenure) status*

**Social Entrepreneurship Faculty Lead, Technology & Entrepreneurship Management Program** (August, 2013 – present) *The Polytechnic School, Ira. A. Fulton Schools of Engineering, Arizona State University*

I created and taught two new Social Entrepreneurship courses (TEM 294 and TEM 394). I've also taught existing department classes with innovative new approaches and/or enhancements, including TEM 100: Seminar in Entrepreneurship, TEM 200: My Technology Venture, TMC 110: Understanding the Enterprise, TMC 470: Enterprise Planning & Implementation (Project Management), TEM 402: Focus Area Project II (Capstone), TMC 480: Senior Design (Capstone), and OMT 570: Advanced Project Management. Led faculty effort to create a new business advisory board for the TEM Program, and serve as administrator and lead faculty liaison for the group of 40 entrepreneurs, business leaders, community leaders and students. Co-founder and faculty advisor for the TEM Student Club. In the spring 2016 semester, a team of students from my TEM 200 class created a new business in class (MyDigital Backpack), which won an Edson Student Entrepreneurship award, ASU's top prize for entrepreneurs.

**Director, MAKE Your Ideas Happen** (December, 2012 – July, 2013)

*College of Technology & Innovation, Arizona State University*

Working with several national award-winning colleagues, I created and launched the 'MAKE Your Ideas Happen' classes at two different ASU campuses in the spring, 2013 semester. I taught several classes in Barrett, The Honors College at ASU's Tempe campus. One of my seven student teams in these classes won an ASU Innovation Challenge award. Also created and successfully launched a new 'High School MAKE Workshop' program taught at the ASU Polytechnic Campus.

**Director, CTI Summer Experience** (December, 2012 – July, 2013)

*College of Technology & Innovation, Arizona State University*

Directed the 2013 CTI Summer Experience to include summer camp sessions for high school (grades 9-12) and middle school students (grades 6-8). These include the nationally prominent Startup Academy (which I led and helped teach), Maker Camps, and Camp Game.

**Director, iProjects** (August 2012 – February 2013)

*College of Technology & Innovation, Arizona State University*

Through the innovative iProjects program, industry partners have the opportunity to engage with ASU students in a mutually beneficial relationship; challenges defined by industry partners are solved through the diligence of student teams working under the expertise of faculty members. Students, industry and the university all benefit. Helped guide the program through an operating transition to record-breaking size.

**Founding Director, EPICS at ASU** (July 2009 – August, 2012)

*Ira A. Fulton Schools of Engineering, Arizona State University*

Launched the Engineering Projects In Community Service (EPICS) Program at ASU, a high tech service learning and community service program in partnership with Purdue University. Created four different classes, which I taught a total of 33 times. Within three years, EPICS became the largest social entrepreneurship program at ASU and the second largest in the nation. EPICS students won numerous national awards for their innovation and fresh technology-based approaches to social entrepreneurship, including the 2012 U.S. Microsoft Imagine Cup (First Place, plus an all-expense paid trip to Australia for me and the students to represent the United States in the World Championship), Entrepreneur magazine's '2011 U.S. College Entrepreneurs of the Year,' Dell Social Innovation Challenge (3<sup>rd</sup> Place), National Collegiate Healthcare Data Challenge, co-sponsored by NSF and the National Institutes of Health (2<sup>nd</sup> and 3<sup>rd</sup> Place). In the 2011-12 academic year, 21 of the 37 teams

in my classes won over \$350,000 in competition and grants, and launched four businesses that were incorporated. During that same period, over 100 media placements occurred for EPICS and various student teams, including spots in *NPR*, *BBC World Service*, *Voice of America*, *Fast Company*, *Entrepreneur* and a variety of television, radio and newspaper pieces. Open to all ASU undergraduate students, the program has three elements: 1. EPICS GOLD and EPICS Turquoise, a sequence of experiential learning classes that form multi-disciplinary undergraduate student teams with local, national, and international not-for-profit organizations, schools and government agencies to address real world social challenges and issues using technology; 2. EPICS Maroon Club, a community service club for ASU students partnering with the Valley of the Sun United Way, City of Phoenix and other organizations; 3. EPICS High School, including award-winning student teams from Xavier College Prep High School.

***Director, Global Futures Initiative, (July, 2005 – July, 2009)***

*Fulton School of Engineering, Arizona State University*

Founded the Global Futures Initiative in 2005, and successfully built the program into a focal point for all global activities within the Fulton School of Engineering. With the vision to globally engage all engineering and computer science students at ASU, this included coordination of a wide range of activities including student involvement in exchange and study abroad programs, overseas work, global volunteerism, international leadership development, and understanding of world cultures. Created and co-taught (with Vin Pizziconi) a 'Global Engineering' course for two semesters. Created the Global Futures ANZACC Scholarship Program sending students to and from Australia and New Zealand, the first international scholarship in the history of engineering at ASU. Established the successful "Global Leadership Lunch" series which brings corporate and community leaders to discuss global careers. Served as chairman of the university-wide "International Education Week" committee, and also ASU's 'Global Education Week.' Served as faculty advisor for the ASU student chapters of Engineers Without Borders (EWB), Bridges to Prosperity, IAESTE, Food for the Hungry, and the Global Futures Student Society.

***Director, ASU Corporate Leaders Program (CLP) (January, 1986 – July, 2005)***

*Fulton School of Engineering, Arizona State University*

Founded the ASU Industrial Fellows Program in 1986, and successfully directed its growth and transformation (1991) into the ASU Corporate Leaders Program, an internationally recognized multidisciplinary graduate study program with a focus on high tech leadership development. Served as co-principal investigator for contracts with over 30 corporate sponsors worth over \$US2 million in the 2001 fiscal year, and over \$US18 million since the Program's inception. Successfully launched the International Industrial Internship (I-cubed) program in 1997 and the CLP Undergraduate Program in 1998. Created the "S.W.A.T." (Students With Advanced Technologies) program, working with Valley of the Sun and Mesa United Ways (and other non-profit community agencies) to promote community service as a leadership development activity. Involvement in the advertising, public relations, promotional, and recruiting aspects of this program have resulted in roles as author, co-designer, and production coordinator for a number of program brochures and newsletters. Job duties involved frequent public speaking. Was also involved in the writing, design and production of a CEAS "Engineering Excellence" brochure and video and undergraduate recruiting brochures. Also served as co-principal investigator (1994-97) on the \$US1.3 million ASU "Manufacturing Across The Curriculum" (MAC) project, federally funded through the Technology Reinvestment Project (TRP) administered by the National Science Foundation (NSF). Have traveled to 22 countries on University business.

***Director, International Corporate Leaders Programme (I-CLP) (January, 1999 – July, 2006)***

Founded the International Corporate Leaders Programme in 1999, creating a global partnership between Arizona State University, Delft University of Technology (Delft, The Netherlands), The Royal Melbourne Institute of Technology University (Melbourne, Australia), and the University of Waikato (Hamilton, New Zealand). Created the Global Tech Leaders Symposium, held at Waiheke Island, New Zealand with over 100 international participants in 2001 and 2002, in Hong Kong and Singapore with over 60 participants in 2003, and Singapore and Tokyo with over 70 participants in 2004. Created the "International Students with Advanced Technologies (I-SWAT) Program" in 2000 to take the benefits of SWAT overseas; a total of 23 high tech community service projects were completed by student and industry volunteer teams in New Zealand in 2001 and 2002, Hong Kong in 2003, and Singapore in 2004 - 2006.

***Visiting Faculty, Office of the Pro Vice Chancellor – International, International Engineering Experience Program, Royal Melbourne Institute of Technology (RMIT) University (on sabbatical from January – July, 2002)***

Spent a sabbatical with the Aerospace Engineering faculty at the Fisherman's Bend campus in Melbourne, Victoria. Worked on corporate outreach programs with Dr. Sylvester Abanteriba, including Boeing Australia and the Lord Mayor's Charitable Trust.

***Director, Engineering Internship Program (EIP) (April, 1998 – June, 2001)***

*College of Engineering & Applied Sciences (CEAS), Arizona State University*

Developed new program pricing formats and budgets for the graduate and undergraduate internship programs that resulted in a record number of summer participants, generated record levels of administrative fees, and record levels of support for the new/transfer student scholarship fund (over \$US160,000 in the 2001 fiscal year). Worked with a corporate advisory group to plan the launch of a new CEAS co-op program. Have also worked with CEAS departments and research centers and other internship programs to strategize and coordinate student employment programs.

***Director, Technology Transfer Programs (October, 1985 - June, 1990)***

*Computer-Integrated Manufacturing Systems Research Center, CEAS, Arizona State University*

Served as Project Leader for Phase I of the Automated Airframe Assembly Program with Northrop Aircraft, managing a project budget exceeding \$US60,000 (1986). Participated in technology transfer aspects of the Integrated Composites Center Project with McDonnell Douglas Aircraft (1986-87). Helped prepare successful application for Center's successful SME-CASA Lead Award (1990). Involved in efforts to address U.S. competitiveness and economic development issues, including speaking engagements and extensive study of maquiladoras and Mexican manufacturers. Helped write and produce two large Center brochures and several other publications.

***People & Technologies Editor, Industrial Engineering Magazine (May, 1981- October, 1985)***

*Published by the Institute of Industrial Engineers (IIE), a not-for-profit membership organization in Norcross, Georgia*

Served as an editor and writer, authoring over 50 articles for this international magazine. I also served as a photographer and participated in special events as requested by the executive director. My travels for the IIE were extensive, and included trips to Europe, Canada, Mexico, and over 20 U.S. states.

## **OTHER PROFESSIONAL EXPERIENCE**

*Facilities Engineer, Sperry Flight Systems, Phoenix, Arizona (1980-81)*

*Industrial Engineer, Garrett/AiResearch Manufacturing Company, Phoenix, Arizona (1979-80)*

*Industrial Analyst, The Boeing Company, Seattle, Washington (1978)*

## **AWARDS AND HONORS (PARTIAL LISTING)**

◆ ***2016 Stanford Medicine X, Arizona Pop Up Speaker***

Medicine X is a catalyst for new ideas about the future of medicine and health care. The initiative explores how emerging technologies will advance the practice of medicine, improve health, and empower patients to be active participants in their own care. I was the only ASU professor invited to speak at the inaugural Stanford Medicine X event held in Phoenix in April 2016.

◆ ***2013 Ford College Community Challenge, Winner***

Presented by the Ford Motor Company, the purpose of Ford C3 is to challenge colleges and universities to partner with their local communities to design innovative, student-led projects that address critical community needs. I served as the faculty mentor for Team FlashFood, the first project and team from Arizona State University to win this prestigious national award.

◆ ***2012 Outstanding Leadership in Social Innovation Education Award, Honorable Mention***

Presented by the Dell Social Innovation Challenge at the RGK Center for Philanthropy and Community Service at The University of Texas at Austin. The award is given for commitment to supporting and mentoring students involved in developing innovative solutions to social problems, fostering creativity in classroom teaching methods and dedication to building institutional support for social innovation education. Over 100 faculties worldwide were nominated.

◆ ***2012 U.S. Imagine Cup, First Place, Microsoft. April, 2012.***

The Microsoft Imagine Cup is the world's largest student technology competition. Served as the faculty adviser for Team FlashFood, an innovative project tackling hunger with technology. Accompanied the student team to Microsoft headquarters in Redmond, Washington, for the U.S. Championship competition, and later, to Sydney, Australia for the World Championships to represent the United States, both trips courtesy of Microsoft.

◆ ***2011 IMPACT and Excellence Award in Recognition of Outstanding Innovation. April, 2011.***

Presented by the Ira A. Fulton Schools of Engineering, Arizona State University. This award recognizes innovation within the Ira A. Fulton Schools of Engineering. All faculty and staff are eligible for nomination by peers, and winners receive a stipend.

- ◆ ***Student Affairs Tribute to Faculty and Academic Professionals. 2004.***  
Presented by the ASU Office of the Vice President of Student Affairs, for recognition as “a leader, a mentor, and a person who has contributed in a significant way to the success of our Arizona State University students.”
- ◆ ***Outstanding Community Building Project Award. 2002.***  
Presented by the United Way International at the International World Assembly 2002 in Cape Town, South Africa by former South African President F.W. de Klerk. The award reads “for selfless service to the United Way New Zealand community, for exemplary leadership in seizing opportunities to care for people, and for helping to build communities through voluntary giving and action...”
- ◆ ***Award of Appreciation. 2000.***  
Presented by the Board of Directors, Valley of the Sun United Way.
- ◆ ***STATUS Award. Presented twice, in 1998 and 1999.***  
Presented by the ASU Office of Student Affairs, for “exemplary efforts on behalf of students.”
- ◆ ***Award of Appreciation. 1997.***  
Presented by ASU Corporate Leaders Program Fellows in classes X and XI, “In appreciation for your time and effort to make the Europe '97 Leadership Study Trip possible.”
- ◆ ***Outstanding Support Award. Presented twice, in 1997 and 1996.***  
Presented by the National Society of Black Engineers, Arizona State University Student Chapter.
- ◆ ***Vision Award. 1996.***  
Presented by the Syin-Lu Foundation of Taiwan.
- ◆ ***Olympic Torch Runner, Atlanta 1996 Summer Games. April 30, 1996.***  
Nominated by the Valley of the Sun United Way, and chosen to represent Mesa, Arizona in the “Community Hero” competition. Carried the Olympic flame for a kilometer through Phoenix.
- ◆ ***Award of Merit - Recruiting Brochure, West Awards Competition. Co-winner, 1991.***  
Presented by the Business Communications & Marketing Association of Los Angeles.
- ◆ ***Education Policy Fellowship Program Participant. 1990-91.***  
Selected by the Institute for Educational Leadership (Washington, D.C.).
- ◆ ***Silver Award - Best Series. 1983. Silver Award - Best Single Article. 1983.***  
National awards presented by the Society of National Association Publications (SNAP).
- ◆ ***Award of Merit. 1982. Certificate of Achievement. 1982.***  
Atlanta Chapter Publications Contest, Society For Technical Communication.
- ◆ ***Award of Excellence. 1981. Honorable Mention. 1981.***  
Atlanta Chapter Publications Contest, Society For Technical Communication.
- ◆ ***The M.A.R.C. Award. 1980.***  
Volunteer award presented by the Marc Center, Mesa, Arizona. Youngest recipient to ever receive the award.

## PROFESSIONAL SOCIETIES

### *American Association of University Administrators*

Board of Directors (1998-2001); Chairman, International Committee (1999 – 2001); Delegate, 1997 House of Delegates Assembly (Denver, CO); Homepage webmaster (1997 – 2000).

### *Association for Tertiary Education Management (Australia)*

### *Association of Leadership Educators*

### *Institute of Industrial Engineers*

*National* -- Co-editor (w/ Dan Shunk) of *IE* magazine's Systems Integration series (1986-87).

*Central Arizona Chapter* -- Board of Directors (1979-81, 86-87); Publisher/Editor (and founder) of the *CACTIE*, chapter newsletter (1980-81, 86-87); Community Service Project Director (1979-81, 86-87).

*Atlanta Chapter* -- Board of Directors (1982-85); Vice President, Public Relations (1984-85); Vice President, Education (1983-84); Community Service Project Director (1982-83).

### *NAFSA – Association of International Educators*

### *National Association of Colleges and Employers*

### *Society of Professional Journalists, Sigma Delta Chi (1983-92)*

## COMMUNITY SERVICE

### *Arc of Arizona*

Board of Directors (1991-1996); Executive Committee (1991-94); Second Vice President (1993-94); Treasurer (1992-93); Secretary (1991-92); Chairman, Strategic Planning Committee (1993); Co-chairman, Finance Committee (1992-93); "Celebration Of Hope" Concert Committee (1993).

### *Arc of the United States*

International Affairs Committee (1993-94); Arizona Delegate, Arc Congress of States (1993-95).

### *Ardoch Foundation (Melbourne, Australia)*

Co-founder, Corporate Task Force (2002)

### *Arizona Department of Economic Security*

Arizona Training Program at Coolidge (ATPC) Advisory Committee (1993-94).

### *Congressman Matt Salmon (First District, Arizona)*

Technology Advisory Group (1995-2000).

### *Desert Palms Church (PCA)*

Elder (1993-97); Clerk of Session (1993-97); Commissioner, Gen. Assembly (1994), Missions Comm. (1997-00).

### *Friends of COMPAS (1989-90)*

Culture Shock I: Vice-Chairman - Volunteer Committee.

### *Jordan Elementary School (Mesa Public Schools)*

School Improvement Advisory Council (1995 – 2000); Homepage webmaster (1997 – 2000); Co-principal investigator, NASA IDEA grant (1996-98).

### *Maricopa County Sports Commission*

Homepage Webmaster (1997–98), MCSA Advisory Board Member (1990-95), Rowing chairman - 1995, 1999 Olympic Festival Bids.

### *Mesa Arc*

Board of Directors (1988-1996), Executive Committee (1989-1996), President (1995-1996), First Vice President (1993-94), Second Vice President (1990-92), Production Committee (1986-90), Personnel Committee (1990-96), Preschool Task Force (1992-93), Chairman - Legislative Affairs Committee (1993-94).

### *Mesa Public Schools*

Elementary Principal Selection Committee (1999), Technology Advisory Committee (1999-00).

### *Mesa United Way*

Community Problem Solving Division: Executive Committee (1991-94); Chairman - Management Assistance Committee (1993-94), Vice chairman (1991-93).

### *Rhodes Junior High School (Mesa Public Schools)*

School Improvement Advisory Council (1997-99).

### *Rio Salado Aquatic Center, Inc. (Co-founder, 1995)*

Vice President (1995-97), Board of Directors (1995-97).

### *Rio Salado Rowing Club (Co-founder, 1991)*

President (1992-96), Board of Directors (1992-97), webmaster (1997 – 2001).

### *United Food Bank*

Board of Directors (1989-93; 1997-02), Secretary (1999-02), Chairman - Strategic Planning Committee (1989-93), Chairman - Nominating Committee (1998 - present), and Development Committee (1997-98).

### *United States Olympic Committee*

Chairman - Transportation Committee, 1991 House of Delegates Meeting (Phoenix); Chairman - Volunteer Committee, 1993 Board of Directors Meeting (Phoenix).

### *US Rowing Association*

Member, Project 2000 National Task Force (1993).

### *Valley Leadership (Class X graduate, 1988-89)*

Association Member (1989 - present), Youth Leadership Program Committee (1995-96), Class XVIII Selection Committee (1996), Education Day Committee (1991), Executive One-On-One Committee (1990), Economic Development Workshop Committee (1990).

## **A SAMPLE OF PRESENTATIONS – INTERNATIONAL & NATIONAL**

Moderator, Global Chamber's Online Social Entrepreneurship Virtual Event, June, 2015. Promoted to members worldwide, this workshop included Bishal Dahal, Global Chamber Executive Director, Nepal, and Katie Mabardy, Executive Director, Project C.U.R.E.

"How To Change The World In Seven Easy Steps," April, 2015. National Association of Engineering Student Councils (NAESC) National Conference. ASU University Club, Tempe.

"Lessons Learned: Making a Global Leadership Development Program Work," presented at the annual conference of NSEE, October, 2004, Miami.

"This Game Is Played On A Global Playing Field – Part Two," presented at the annual Global Tech Leaders Symposium to participating students and faculty, March, 2004. American House, Tokyo.

"This Game Is Played On A Global Playing Field – Part One," presented at the annual Global Tech Leaders Symposium to participating students and faculty, March, 2004. Night Safari Conference Center, Singapore.

"International Job Exchanges for Students: Do they Work," presenter and panel participant, International NAFSA Conference, May, 2003, Salt Lake City.

"Global Leadership And You – Part Two," presented at the annual Global Tech Leaders Symposium to participating students and faculty, March, 2003. Golden Landmark Hotel, Singapore.

"Global Leadership And You – Part One," presented at the annual Global Tech Leaders Symposium to participating students and faculty, March, 2003. Harbour Plaza Metropolis Hotel, Hong Kong.

"Technology Linking Borders" workshop, presented at the United Way International World Assembly, May, 2002, President Protea Hotel, Cape Town, South Africa.

"Leadership Development Goes Global," presented at the annual BeNeLair Conference, including students, faculty, and industry representatives, May, 2001. Conference Hall, Delft University of Technology, Delft, The Netherlands.

"Community Service in New Zealand," presented to the Right Honourable Helen Clark, Prime Minister of New Zealand and attendees at a dinner sponsored by the United Way of Greater Auckland and the Auckland Volunteer Centre, March, 2001. Auckland, New Zealand.

"Developing A Leadership Development Program For Engineers: One University's Experience," presented to administrators of British Aerospace Virtual University, March, 1999, Farnborough, England.

"Industry Partnerships Present New Opportunities for Universities," presented to engineering faculty and university administrators, Boğaziçi University, March, 1999, Istanbul, Turkey.

"Motorola and the ASU Corporate Leaders Program," presented to management and engineers at Motorola SPS, March 1998, Tianjin, China.

"Developing the Leadership Potential of Engineering and Business Students," presented to faculty and graduate students in the School of Management, Beijing University of Aeronautics & Astronautics, March 1998, Beijing, China.

"Leadership and Engineering: The American Experience," presented to faculty in the College of Engineering, Myong-Ji University, March 1998, Yong-In, South Korea.

"Leadership Development for Industrial Engineers: How Industry and Universities Work Together to Create Leaders," presented at the 22<sup>nd</sup> International Conference on Computers and Industrial Engineering, December 1997, Cairo, Egypt.

"Leadership for Engineers," presented to faculty and graduate students in the College of Engineering, University of Alexandria, December 1997, Alexandria, Egypt.

"Leadership: North American Style!" presented at the VI Congreso Nacional, a Mexican national conference sponsored by the Institute of Industrial Engineers (IIE), Universidad Popular Autonoma del Estado de Puebla (UPAEP), October, 1997, Puebla, Mexico.

"What Engineers Need to Know About Leadership," presented to faculty and graduate students in the College of Engineering, University of Sts. Cyril & Methodius (UKIM), March 1997, Skopje, Macedonia.

"Leadership: A New Approach For Non-Profits", presented at the Syin Lu Foundation Pacific Rim Symposium, September 1996, Taipei, Taiwan.

"Industry and Academe: A Perfect Partnership for Graduate Engineering Education in the 1990s", presented at the Seventh World Productivity Congress, November, 1990, Kuala Lumpur, Malaysia.

## PUBLICATIONS - BOOK/BOOKLET

Filley, Richard D., *Climb Higher, See Farther: An Introduction to Technology Entrepreneurship*, Kendall Hunt Publishing Co., Dubuque, IA. Textbook scheduled for release in January, 2017.

Drui, Bert, and Richard D. Filley, Robert Hairfield, and Rebecca Johnson, *Industrial Engineering In The Boeing Company*, The Boeing Company, Seattle, WA, 1978. 154 pages.

Filley, Richard D., and Kathryn Szoka, *Communicating With Graphics: A Reprint Of A Series From Industrial Engineering*, 1981-82. Institute of Industrial Engineers, Norcross, GA, 1982. 70 pages. \$19.50.

## PUBLICATIONS - MAGAZINE/PERIODICAL ARTICLES

(☉) Cover, and (★) lead articles are noted.

"Developing Leadership Via A Corporate Leadership Program," *Proceedings of Australasian Association for Engineering Education Annual Conference*, Canberra, Australia, September 30 - October 2 2002.

"Leadership Development for Engineers and Computer Scientists: How Industry and Universities Can Work Together to Create Leaders," *China Post*, Taipei, Taiwan, October 18, 1998.

★ "Corporate Partnership Focuses on Leadership Development at Arizona State University," *CPC Engineering Network News*, November 1993, pp. 1, 3. (A national newsletter of the College Placement Council).

"Engineering Legacies", *ASU Spectrum*, Fall, 1990, pp. 14-15.

"How Work Is Changing -- And Why: With Technology Rewriting All The Rules, You'll Do Things Differently In The Future", *Futuretalk*, October 1989, pp. 6-7.

"Arizona, U.S.A.", *Electronics*, November 1988, pp. 143-169. (Appeared as part of a special advertising section sponsored by Arizona industry).

"ASU Industrial Fellows Program: Research On The Job", *ASU Research*, summer, 1988, pp. 8-9.

★ "Talking Computer To Computer", *ASU Research*, Spring, 1986, pp. 20-21.

"Systems Integration Series, Part 4: Roundtable Participants Discuss Systems Integration Trends, Strategies, Champions", *Industrial Engineering*, August 1986, pp. 26-34. (Organized and moderated the roundtable, edited the transcript for publication).

"Systems Integration Series, Part 1: Systems Integration's Challenges Demand A New Breed Of Industrial Engineer", *Industrial Engineering*, May 1986, pp. 64-67. (Co-authored with Dan L. Shunk, Arizona State University).

"IEs Have Tremendous Opportunities For Improving Company's Maintenance Function", *Industrial Engineering*, February 1986, pp. 30-32.

"IIE Holds First Annual Electronics Assembly Conference", *Industrial Engineering*, February 1986, pp. 72-74.

"1986 Project Management Software Buyer's Guide", *Industrial Engineering*, January, 1986, Pp. 51-63, 100.

★ "IE Leaders Give Views On Where Their Profession Is Headed", *Industrial Engineering*, December 1985, pp. 34-44.

"1985 Bar Code Equipment Buyer's Guide", *Industrial Engineering*, November, 1985, Pp. 33-44.

"CIE Members Visit Dutch Firm: 2,500 IEs Work For Worldwide Philips, A Leader In Quality And Technology", *Industrial Engineering*, October 1985, pp. 96-104.

"Boeing's Executive Information Network", *Industrial Engineering*, September, 1985, Pp. 38-39. (Sidebar).

"Annual IIE Conference Attendees Focus On Productivity, Quality And Excellence", *Industrial Engineering*, July 1985, pp. 28-31.

"Three Emerging Computer Technologies Boost Value Of, Respect For Facilities Function", *Industrial Engineering*, May 1985, pp. 27-39. (Article includes Third Annual Facilities Software Buyer's Guide).

"Industrial Engineering: New Areas Of Opportunity Boost Demand", *Engineering Horizons*, Spring, 1985, pp. 30-33.

★ "Health Care Costs Take Spotlight As Technological Advances Collide With Issues And Practicalities", *Industrial Engineering*, March 1985, pp. 34-45.

★ "CIMS Series, Part 13: Roundtable Participants Talk About CIM Myths and Realities, People Aspects And The Future", *Industrial Engineering*, January 1985, pp. 34-51. (Organized and moderated the roundtable, edited the transcript for publication).

"What's Holding IEs Back From The Office Of The Future?", *Industrial Engineering*, December, 1984, Pp. 38-45.

"1984 Bar Code Equipment Buyer's Guide", *Industrial Engineering*, November 1984, pp. 29-39.

"Radio Frequency Identification Systems Provide Flexibility", *Industrial Engineering*, November 1984, p. 67. (Sidebar).

★ "IEs At Top Combine Global Perspectives, People Skills And Risk Taking As They 'Manage The Future'", (Covered - George L. Anton, P.E., Capitol Products Corp.; Franklin G. Bishop, P.E., Matrix Corp.; C. Stephen Lynn, Sonic Industries), *Industrial Engineering*, August, 1984, pp. 25-32.

★ "IEs On Olympics Organizing Team Solve Logistics Problems, Apply High Tech To Help Hold Costs Down", *Industrial Engineering*, July 1984, pp. 44-55.

★ "A Survey Of Software For Facilities Planning And Design", *Industrial Engineering*, May, 1984, Pp. 71-79.

"Industrial Engineering: Stepping-Stone To Management", *Engineering Horizons*, Spring, 1984, pp. 79-81.

"International Conference Looks At Changes in Design, Function and Role of Warehousing Today", *Industrial Engineering*, February 1984, pp. 82-84.

"Fall Conferees Focus On Theme, 'Integrating People And Systems'", *Industrial Engineering*, January 1984, pp. 98-101.

"New Directions In IE Education: Labs And Study Centers At Schools Around The U.S. Taking Innovative Approaches To Student Preparation", (Covered - Arizona State, Engineering Excellence Center; California-Berkeley, Operations Research Center; Georgia Tech, Material Handling Research Center; Lehigh, CAD/CAM Laboratories; Michigan, Center For Robotics And Integrated Manufacturing; Oklahoma State, Oklahoma Productivity Center; Penn State, Computer-Integrated Manufacturing Laboratories; Purdue, Computer-Integrated Design Manufacturing And Automation Center; Texas A&M, Industrial Automation Laboratory; Virginia Tech, Human Factors Laboratories), *Industrial Engineering*, January, 1984. Pp. 52-72.



★ "IEs Help Avert Plant Closing: GM Plant Kept Open Through Cooperative Efforts Of Company, University, UAW And Community", Industrial Engineering, January 1984, pp. 48-51.

"Results of IIE's Third Annual Productivity Survey: IEs Describe Productivity Improvement Efforts, Identify Obstacles To Their Success", Industrial Engineering, November 1983, pp. 84-88.

"IEs Provide Input For White House Meeting on Issues Raised by Productivity Problems", Industrial Engineering, November 1983, pp. 30-32.

"Computer Usage Survey Profiles IEs' Own Expanding Applications, Role In Company Use Decisions", Industrial Engineering, October 1983, pp. 88-92.

"Bar Code Guide And Survey Detail What's Available, How It Can Smooth Your Operation", Industrial Engineering, September 1983, pp. 74-94.

★ "IEs At The Top: Nine Company Heads Discuss Leadership, Management And The Value Of Their IE Experience", (Covered - Harry E. Teasley, Jr., The Wine Spectrum; Thomas R. Williams, P.E., First Atlanta Corp.; John R. Selby, SPS Technologies; Berl M. Springer, Southwestern Public Service Co.; L. Jack Bradt, SI Handling Systems; Marvin J. Cetron, Forecasting International, Ltd.; David A. Norman, Businessland; Robert E. Reiss, Advanced Cardiovascular Systems; Brooke Reeve, Jr., Great Dane Trailers), Industrial Engineering, August, 1983, pp. 32-57.

"L.L. Bean's IEs Help Mail-Order Institution Handle Success While Holding Onto Tradition", Industrial Engineering, June 1983, pp. 46-58.

★ "High Tech Projects In Manufacturing: IEs Put The Mark Of High Productivity On High Technology Applications Projects", (Covered - Todd Pacific Shipyards, Los Angeles; Hewlett-Packard, San Diego; IBM Data Systems, Poughkeepsie, NY; AVCO-Lycoming, Stratford, CT; McDonnell Aircraft, St. Louis), Industrial Engineering, May, 1983, pp. 58-60, 86.

"IEs Reveal Their 'Superhero' Identity In Fields Ranging From Finance To Forestry", Engineering\* 1983, March 1983, pp. 4-9.

"CAD For Facilities Planning: Survey Identifies Software, Systems Most Useful To IEs", Industrial Engineering, March 1983, pp. 66-80.

★ "Productivity Projects In Service/Support: IEs Make Good Use Of People-Oriented Skills In Helping Their Organizations Provide Service Productively", (Covered - Canadian National Railways, Montreal; Wisconsin Electric Power Co., Milwaukee; Burger King, Miami; Harper-Grace Hospitals, Detroit; State of Oregon government, Salem; American Express, Ft. Lauderdale, FL), Industrial Engineering, January, 1983, pp. 36-59.

"High Tech Topics Were Prominent At IIE Annual Fall Conference", Industrial Engineering, January 1983, pp. 30-32.

"Second Annual Productivity Survey Results: IEs Gauge State Of U.S. Work Ethic, Effectiveness Of Productivity Activities", Industrial Engineering, November 1982, pp. 26-32.

★ "Profile Of An IE: With Identities Revealed, New Industry Heroes Make Mighty Contributions To Productivity", Industrial Engineering, August 1982, pp. 34-44.

★ "IEs At The Top: Ten Top Execs Place A High Value On Their IE Backgrounds", (Covered - Edward J. Campbell, Newport News Shipbuilding; Richard C. Kessler, Days Inns of America; Robert G. Marbut, P.E., Harte-Hanks Communications; Gordon G. Palmer, Litton UHS; James W. McLernon, P.E., Volkswagen of America; Thomas L. Newberry, P.E., American Software; Harold S. Mohler, P.E., Hershey Foods Corp.; Thomas H. Savage, ITT Canada; J. Barry Johnson, P.E., Baptist Hospitals and Health Systems; L. Stanley Crane, Conrail), Industrial Engineering, July, 1982, pp. 36-60.

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