

PROFESSIONAL PROFILE

Cynthia C. Fry

14010 FM 182
Clifton, Texas 76634
email: cindy_fry@baylor.edu

Marital Status: Married (Joseph D. Fry)
Children: Tom, Katelyn, and Alice
Date of Birth: September 15, 1962

Education

Texas A&M University, College Station, Texas
Bachelor of Science in Industrial Engineering, 1984
University of Alabama in Huntsville, Huntsville, Alabama
Master of Science in Industrial & Systems Engineering, 1989

Academic Background

Senior Lecturer, Department of Computer Science, School of Engineering & Computer Science, Baylor University (2005–present)

Senior Lecturer in the Department of Computer Science. Courses taught include “Intro to Computer Science I,” “Discrete Structures,” “Intro to Computer Systems”, “Foundations of Computing”, “Systems Programming”, “Numerical Methods”, and “Special Topics” (for both Computer Science and Engineering). Co-Director of Baylor’s Technology Entrepreneurship Initiative. Kern Entrepreneurship Education Network (KEEN) Fellow. Chair of the Computer Science Curriculum Committee. Faculty Advisor for Baylor student section of Women in Computer Science (WICS).

Assistant Dean, School of Engineering & Computer Science, Baylor University (2007-2013)

Serve as chair of the ECS Systems Committee, developing and managing the School’s capital equipment budget. Serve as chair of the ECS Curriculum Committee. Serve as chair of the ECS Leadership Committee. Oversee all curricular. Developed and implemented a time-management and study skills program for those students wishing to appeal academic suspension. Conducted research on most relevant indicators of success for students considering ECS as an academic career path. Conducted research on best practices in undergraduate teaching effectiveness in the School of Engineering & Computer Science.

Lecturer, Department of Computer Science, School of Engineering & Computer Science, Baylor University (1997-2005)

Lecturer in the Department of Computer Science. Courses taught include “Intro to Computer Science I”, “Intro to Computer Science II”, “Intro to Computer Systems”, and “Intro to Engineering Analysis & Design” (for the Department of Engineering). Chair of the Computer Science Recruitment and Retention Committee. Faculty Advisor for Baylor student section of the Society of Women Engineers since 1999.

Professional Background

**Systems Engineering Services (1992 to 2000)
Waco, Texas**

Owner and chief systems engineer for Systems Engineering Services (SES). SES is a computer systems design, development, and consultation firm, currently designing, programming, and installing networked medical accounting and billing software systems for individual physicians and multi-specialty multi-physician practices.

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Network consultation / administration.

**National Aeronautics and Space Administration (1984-1992)
Marshall Space Flight Center (MSFC), Huntsville, Alabama**

(1989 - 1992) Science Operations Director for shuttle flight STS-46, the first electrodynamic flight of the Tethered Satellite System (TSS-1), Payload Operations Division, Mission Operations Laboratory.

(1988 - 1989) Crew Training Manager for STARLAB, a DOD-dedicated Spacelab mission, Manned Systems Branch, Science & Engineering Laboratory.

(1986 - 1988) Senior Project Engineer, Manufacturing, Assembly, and Checkout Office, Space Station Projects Office

(1984 - 1986) Project Cost Engineer, Advanced X-ray Astrophysics Facility, Program Development Directorate

Military Background

Received Presidential Direct Commission as an Engineering Duty Officer in the U.S. Naval Reserve.

Served as Engineering Department Head for Naval Weapons Station, Charleston, detachment 409.

Served as Security Officer and Scientific and Technical Intelligence Analyst for Naval Maritime Intelligence Center, detachment 2109. Selected Reserve Junior Intelligence Officer of the Year, 1992.

Awards and decorations include the National Service Medal and the Meritorious Unit Commendation for intelligence support during Operations DESERT SHIELD and DESERT STORM. Clearance held: Top Secret/SCI.

Honors and Awards

“Best Presenter,” Conference for Industry and Education Collaboration, 2010

KEEN “Most Improved” Institution, 2010

“Woman of Distinction 2008”, Girls Scouts of Central Texas

KEEN Fellow, 2008

Faculty-In-Residence in the Engineering & Computer Science Living-Learning Center, 2006

Baylor Outstanding Teaching Faculty Award, May 2004

Provosts Outstanding Faculty Partner 2004

Faculty Advisor for Baylor Student Chapter of the Society of Women Engineers, 1999-present, 2001 “Best New Student Section” in the Nation

Mortar Board Circle of Light Honoree, 2001, 2004

Phi Kappa Chi “Light Your World” Honoree, 1998, 1999, 2000, 2001, 2002, 2003

Selected as the NASA/Marshall Space Flight Center (MSFC)

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representative to the International Space University, held at the Universite Louis Pasteur in Strausborg, France, 1989.

Awarded the MSFC Director's Discretionary Fund for independent research and development in conjunction with the National Science Foundation's Amundsen-Scott South Pole Station.

MSFC representative to the Advisory Committee on the Future of the U.S. Space Program

NASA Executive Development Program

Texas A&M University Undergraduate Fellow

Publications

Yoder, JD, Carpenter, Don, **Fry, Cynthia**, Kleine, Robert “Spreading the Fire: Broadening Faculty Support for the Entrepreneurial Mindset,” 2013 NCIIA Open Conference, Washington, D.C., March 2013.

Hanifin, L., Lee, R., Weaver, J., Bloemer, K., **Fry, Cynthia**, “The Influence of Culture, Process, Leadership and Workspace on Innovation and Intrapreneurship in American Corporations, and the Implications for Engineering Education,” 2013 ASEE National Conference & Exposition, Atlanta, June 2013.

Fry, Cynthia, Condoor, Sridhar, Kriewall, Timothy, Kitts, Christopher, “Working Collaboratively Among Universities: A Dense Network Approach,” 2012 ASEE National Conference & Exposition, San Antonio, June 2012.

Fry, Cynthia, Jordan, William, Dougherty, Edmond, Rayess, Nassif, Singh, Pritpal, Bloemer, Kenneth, “The Helping Hands Dense Network: A Collaboration Across Multiple Universities,” 2012 ASEE National Conference & Exposition, San Antonio, June 2012.

Fry, Cynthia and Van Treuren, Kenneth, “Excellence in Undergraduate Engineering Education – the Challenge for Research-Oriented Programs in Engineering and Computer Science,” 2012 ASEE National Conference & Exposition, San Antonio, June 2012.

Van Treuren, Kenneth, **Fry, Cynthia**, Jean, Randall, “Teaching Creativity and Innovation in the Classroom,” 2012 ASEE National Conference & Exposition, San Antonio, June 2012.

Jordan, William and **Fry, Cynthia**, “Assessing a Dense Network of Entrepreneurially Minded Engineering Programs,” 2012 ASEE National Conference & Exposition, San Antonio, June 2012.

Fry, Cynthia and Leman, Gregory, “Baylor University’s Technology Entrepreneurship Practicum – Creating Learning Opportunities Via Student Consultative Engagements that Actually Propel Ventures Forward,” NCIIA 2011 Open Conference, Washington, D.C., March 2011.

Fry, Cynthia, Rife, William, Carpenter, Donald, and Yoder, John-David, “Best Practices for Teaching the Entrepreneurial Mindset to Faculty Members,” NCIIA 2011 Open Conference, Washington, D.C.,

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March 2011.

Fry, Cynthia and Pistrui, David, "Assessing the Entrepreneurial Mindset within Engineering Programs," 2011 ASEE National Conference & Exposition, Vancouver, British Columbia, June 2011.

Fry, Cynthia and Jordan, William, "Engineering Education and the Entrepreneurial Mind at Baylor University," 2011 ASEE National Conference & Exposition, Vancouver, British Columbia, June 2011.

Pistrui, David, Bonstetter Ron, Bonstetter Bill, and **Fry, Cynthia**, "Creating, Educating and Assessing a New Class of Entrepreneurial Minded Engineers," The Journal of Engineering Entrepreneurship, Vol. 2, Number 2, 2011.

Leman, Greg, **Fry, Cynthia**, "Telling Your Story the SuperCoach Way," presented at the Annual KEEN Fall Meeting, Milwaukee, Wisconsin, October 2010.

Fry, Cynthia, Jordan, William, Leman Gregory, Garner, Brian, Thomas, Brian, "Bringing Innovation and the Entrepreneurial Mindset (Back) Into Engineering & Computer Science: the KEEN Innovators Program," 2010 ASEE Annual Conference & Exposition, June 20-23, 2010, Louisville, Kentucky

Fry, Cynthia and Gaitros, Donald, "Renaissance Software Design: The Development of the Computer Science Fellows Program at Baylor University," 2010 ASEE Annual Conference & Exposition, June 20-23, 2010, Louisville, Kentucky

Fry, Cynthia and Leman, Gregory, "Non-Traditional Preparation for a Global Workplace," 2010 ASEE Conference on Industry Education Collaboration, February 2-5, 2010, Palm Springs, California

Fry, Cynthia and Ecklund, Adam, "Recruiting and Retention of ECS Students at Baylor University," 2010 ASEE Conference on Industry Education Collaboration, February 2-5, 2010, Palm Springs, California

Fry, Cynthia and Leman, Gregory, "The i5 Program: The Challenges of Implementing a Project-Based Summer Study Abroad Program that Integrates Technology and Entrepreneurship in China," 2009 ASEE National Convention, June 14-17, 2009, Austin, Texas

Fry, C., Davis, J., Shirazi-Fard, Y., "Recruitment and Retention of Females in the STEM Disciplines: The Annual Girl Scout Day Camp at Baylor University." 38th ASEE/IEEE Frontiers in Education Conference, Saratoga Springs, New York, October, 2008.

Fry, C. and Leman, G. "Exposing Undergraduate Engineering and Computer Science Students to the Asian Business Culture in a Project-Based Abroad Program: An Assessment of Program Challenges." 38th ASEE/IEEE Frontiers in Education Conference, Saratoga Springs, New York, October, 2008.

Jordan, W., Bradley, W., Thomas, B., **Fry, C.**, Grinols, A., Blalock, G., "Promoting an International Perspective in an Undergraduate

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Engineering Program”, 2008 ASEE National Conference, June 2008, Pittsburg, PA.

Kelley, B., Doty, R., Booth, B., **Fry, C.**, “Engineering Economy Assessment of Baylor’s Pilot Global Business Communications Course,” 2008 ASEE National Conference, June 2008, Pittsburg, PA.

Bradley, W., Grinols, A., Blalock, G., Jordan, W., Leman, G., **Fry, C.** (2008) “*Incorporating Global Entrepreneurship Courses into an Engineering Curriculum,*” National Collegiate Inventors and Innovators Alliance 12th Annual Meeting, March 20-22, 2008, Dallas, Texas.

Fry, Cynthia C. and Leman, Gregory S., “International Technology Entrepreneurship: Immersion into Interdisciplinary Innovation (I5) in Shanghai”, 37th ASEE/IEEE Frontiers in Education Annual Conference, October 10-13, 2007, Milwaukee, WI

Fry, Cynthia C., Leman, Gregory S., Doty, Robert, Sriram, Rishi. “Teaching International Technology Entrepreneurship in the Undergraduate Engineering and Computer Science Curriculum,” 2007 ASEE Gulf-Southwest Annual Conference, University of Texas – Pan American, March 2007.

Van Treuren, Ken, Eisenbarth, Steve, and **Fry, Cindy**, “*The Development of a Global Worldview or How an Expected Graduate Outcome Could Change Engineering Education,*” Proceedings of the 2006 American Society for Engineering Education Annual Conference & Exposition, Chicago, Illinois, June 2006

Kelley, B.S., Boon, K.L., **Fry, C.C.**, Abrahams, M.D. (2006) “Developing a Global Technical/Business/Communication Experience for Students,” Proceedings of the 2006 ASEE Gulf-Southwest Annual Conference,

Fry, Cynthia C., “*The Development of a Summer Study Abroad Program or Engineering and Computer Science Students at Baylor University,*” 34th ASEE/IEEE Frontiers in Education Conference, Savannah, Georgia, October 2004

Kelley, Benjamin S., **Fry, Cynthia C.**, Sturgill, David B., Thomas, J. Brian, “*Faith-Based and Secular Experience on Rebuilding Engineering and Computer Science Higher Education in Kurdistan of Iraq,*” Proceedings of the 5th Christian Engineering Education Conference, pp 35-47, Westminster College, Salt Lake City, Utah, June, 2004

Van Treuren, Ken, Eisenbarth, Steve, and **Fry, Cindy**, “*A Retention Study at Baylor University,*” Proceedings of the 2003 American Society for Engineering Education Annual Conference & Exposition, Nashville, Tennessee, June 2003

Fry, Cynthia C., and Allgood, Shelli L., “*The Effect of Female Student Participation in the Society of Women Engineers on Retention – A Study at Baylor University,*” 32nd ASEE/IEEE Frontiers in Education Conference, Boston, Massachusetts, November 2002

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Van Treuren, Kenneth W., Eisenbarth, S., and **Fry, Cynthia C.**,
“*Developing Engineering Student Success – A Retention Study at Baylor University*,” ASEE Gulf Southwest Section Conference, Lafayette, Louisiana, 2001

DeJong, N.C., K.W. Van Treuren, D.R. Farris, and **C.C. Fry**, 2000,
“*Using Design to Teach Freshman Engineering*,” ASEE National Conference, St. Louis, 2000

Fry, Cynthia C. and Osborne, Jessica M., “*Study of the National Science Foundation's Antarctic Station as an Analogous Data Base for the Design of a Lunar Base*”, Summer High School Apprenticeship Research Program (SHARP), Marshall Space Flight Center, Huntsville, Alabama, 1990.

Fry, Cynthia C., “*Cost Modeling of Aerospace Systems in Early Design Phases: A Systems Approach*”, University of Alabama in Huntsville, 1989

Fry, Cynthia C., “*Sociological Aspects of Long Duration Manned Spaceflight*”, Proceedings of the American Institute of Aeronautics and Astronautics Aircraft Design and Operations Meeting, Atlanta, Georgia, 1988

Fry, Cynthia C., “*Space Station Management After the Challenger*”, Proceedings of the Technical and Business Exposition/Symposium (TABES 87), Huntsville, Alabama (1987).

External Funding

HP Leadership Development Gift, July 2013, **\$1,500**

KEEN Dense Network Grant, November 2011, **\$736,000, PI**

KEEN (Kern Entrepreneurship Education Network) Planning Grant, July 2010, **\$75,000, PI**

KEEN (Kern Entrepreneurship Education Network), May 2008, **\$50,000, CoPI**

Kern Family Foundation Planning Grant, awarded June 2007, **\$5,000, CoPI**

HP Gift to Promote Cross-disciplinary initiatives between the School of Engineering & Computer Science and the Hankamer School of Business, May 2007, **\$150,000**

Professional Memberships

Society of Women Engineers
Association for Computing Machinery

Civic Activities

Elder, Acts Church Waco
Community Leader, Acts Church Waco
Life Group Leader, Acts Church Waco