



Mitchell A. (Mitch) Thornton is the Cecil H. Green Chair of Engineering and Professor in the Department of Electrical and Computer Engineering at Southern Methodist University in Dallas, Texas. Additionally, he serves as the Director of the Darwin Deason Institute for Cyber Security, a research unit at SMU. His industrial experience includes employment at the Amoco Research Center, E-Systems, Inc (now L-3 Communications), and the Cyrix Corporation where he held a variety of engineering positions. He has practiced as an independent professional engineer since 1993. His practice areas include digital systems design and analysis, computer architecture, computer systems security, embedded systems, and signal processing algorithms. He is an author or co-author of over 250 technical articles and five books and he is a named inventor on five US patents and five provisional or patents pending.

He has consulted with and performed sponsored research for several different federal government agencies and industrial organizations. In terms of engineering practice, he is a licensed professional engineer in the states of Texas, Arkansas, and Mississippi and he holds a commercial general radiotelephone operator license (GROL) with ship radar endorsement from the U.S. Federal Communications Commission. He received the PhD in computer engineering from SMU, MS in computer science from SMU, MS in electrical engineering from the University of Texas at Arlington, and BS in electrical engineering from Oklahoma State University.

Dr. Thornton's academic career includes a previous faculty appointment at the University of Arkansas where he was an Assistant Professor and later an Associate Professor in the Department of Computer Systems Engineering from 1995 through 1999. From 1999 through 2002 he was an Associate Professor at Mississippi State University in the Department of Electrical and Computer Engineering. He joined the faculty at Southern Methodist University in 2002 as an Associate Professor and is currently the Cecil H. Green Chair of Engineering and Professor. His research activities generally revolve around modeling, simulation, formal verification, and design of digital systems including both conventional electronic and emerging technology implementations. In recent years, his research focus has centered on computer systems (cyber) security and aspects of quantum computing and quantum information processing.

Dr. Thornton's past industrial positions include previous full-time employment at E-Systems, Inc. in Greenville, Texas and at the Cyrix Corporation in Richardson, Texas. At E-Systems he began his employment as an Associate Engineer/Analyst in the Analytical Techniques group and later moved to the Special Systems group where he was a Senior Electronic Systems Engineer. His duties at E-Systems were focused on the design, analysis, implementation, and test of airborne RF and signal processing systems from front-end sensor design to back-end automated processing algorithms. He was involved in these activities ranging from early conceptual design of new systems to operational flight test, evaluation, and upgrade of deployed systems. At Cyrix, he was employed as a Design Engineer where he was responsible for the design of a portion of the microarchitecture of a microprocessor that is compatible with the Intel Pentium. During his years as an undergraduate, he was employed by the Amoco Research Center in Tulsa, Oklahoma as a Research Technician. At Amoco, he was in the modeling and inversion theory group where he worked with geophysical research scientists and developed modeling, inversion, and signal processing software for seismic petroleum exploration applications.

Dr. Thornton is a member of several professional and honor societies including the Institute of Electrical and Electronics Engineers (IEEE) and the Association of Computing Machinery (ACM) where he is a senior member in each organization. With regard to service activities, he has contributed to US licensing practice and policy of professional engineers and was formerly the chair of the National Council of Examiners for Engineers and Surveyors (NCEES) working group that develops the national professional engineering licensure examination for electrical and computer engineers. He has also served in leadership roles for several conferences and symposia and was previously the chair of the IEEE Computer Society Technical Committee on Multiple-Valued Logic. He has served on editorial boards and is currently the book series editor of the digital circuits and systems series for Morgan-Claypool publishers. In terms of professional policy, Dr. Thornton is a former chair of the IEEE-USA Committee on Licensure and Registration and continues to participate in aspects of the formation and promotion of US policy to support the electrical and computer engineering profession.

Among the awards he has received are a Citation of Honor from the IEEE and an Inventor Recognition award from the Semiconductor Research Corporation. At SMU he was designated a Gerald Ford Senior Research Fellow in 2004 and was the J. Lindsey Embrey Trustee Associate Professor of Computer Science and Engineering from 2003 through 2004.