

## ***CURRICULUM VITA (Executive Summary) of Carl K. Chang – October 1, 2014***

***Highlights of Administrative Contributions:*** Chang served as department chair for eleven years from 2002-2013 in the department of computer science at Iowa State University. During his terms as the chair he promoted two full professors, twelve associate professors, four senior lecturers, and cultivated six NSF CAREER awardees. He led the faculty and weathered several rounds of budget cuts and reversions since having arrived at ISU. The department continued to grow in faculty size and strength, and heavily engaged in interdisciplinary research. Today, Computer Science at ISU has visibly moved up in its national ranking and significantly improved its academic reputation with a globally recognized faculty.

***Undergraduate Education:*** Chang spearheaded the joint task force on Computing Curricula 2001 (CC2001) for education renovation in a global setting, an effort of the IEEE Computer Society (IEEE-CS) and the Association for Computing Machinery (ACM). CC2001 has had a major impact on undergraduate computing education worldwide. He is highly experienced with accreditation, articulation, and certification matters in higher education and the computing profession. Since he joined Iowa State, Chang led the Computer Science Department to have developed a joint software engineering undergraduate degree program with computer engineering faculty. He led the department in several rounds to have earned or renewed accreditations of both computer science and software engineering programs by ABET. He also contributed to education renovation through initiating the interdisciplinary Gerontechnology Program at ISU, partially funded by the National Science Foundation, to train technologists in support of the national agenda on successful aging.

***Graduate Education:*** Chang is a popular academic advisor and has attracted many graduate students to work in his research group to study the latest software technologies and engage in hands-on projects. Since he began his academic career at the University of Illinois in 1984, he advised 29 Ph.D. dissertations, 27 M.S. theses, and more than 200 M.S. projects. At ISU, he has led the department to expand the Ph.D. program with about 100 Ph.D. students at peak. Under his chairmanship, the department supported and congregated 8 NSF CAREER awardees and one endowed chair in the past decade.

***Research and Grants:*** His current research interests include software architecture, requirements engineering, services computing and successful aging. He has published extensively in these areas in journals and refereed conferences, and various column articles and editor's messages. In the past 20 years, he has attracted numerous external grants from federal funding agencies and industry sources to support his research. To date, sixteen visiting scholars from foreign countries have been hosted for joint research in Chang's labs.

***Professional Services:*** Chang has been an active volunteer leader in the IEEE Computer Society for almost three decades, the largest and oldest computer association in the world. He was elected 2004 President of the society. Before that, he served as the First Vice President (2001) to lead the Educational Activities Board. He served as Editor-in-Chief (EIC) of *IEEE Software* for two terms (1991-92; 1993-94) and in that capacity established a legendary Industrial Advisory Board. He organized the 1997 President's Roundtable to develop a technology roadmap for IEEE-CS. As a recognized scholar in software engineering, he co-founded the IEEE International Conference on Requirements Engineering (ICRE), and the Symposium on Applications and the Internet (SAINT) co-sponsored by the IEEE-CS and Information Processing Society of Japan. He is now chairing the standing committee of the IEEE International Computer Software and Applications Conference (COMPSAC), the IEEE signature conference on computer software technology for computer and software professionals. In January 2007 he was appointed Editor-in-Chief of *IEEE Computer*, the flagship publication for the IEEE Computer Society. In that capacity, he spearheaded a Society-wide initiative and successfully invited founding members of the IEEE-CS Industrial Advisory Board, which is a premier industrial forum with global expertise and networks. Chang is now Editor-in-Chief Emeritus of IEEE Computer after having served as EIC for two terms (2007-08; 2009-10).

***Awards, Medals, and Honors:*** As an IEEE Fellow, he received the Computer Society's Outstanding Contribution Award, Meritorious Service Award, and the Golden Core Award, in addition to the IEEE Third Millennium Medal. He finished a 3-year term (2000-02) as a Distinguished Visitor for IEEE-CS. In 2004 he was elected Fellow of the American Association for the Advancement of Science (AAAS). In 2006, he received the prestigious Marin Drinov Medal from the Bulgarian Academy of Sciences. Through a globally competitive selection program, he received prestigious IBM Faculty Awards in 2006, 2007, and 2009. He is the recipient of the 2012 IEEE Richard E. Merwin Medal for his contributions and leadership in the computing profession. In 2014, he was selected as the 2014 Distinguished Alumnus for his alma mater, National Central University in Taiwan, and recipient of the 2014 Overseas Outstanding Contributions Award by the China Computer Federation (CCF), the largest professional association in China, from the pool of internationally recognized computer scientists of Chinese origin outside China.