

Curriculum Vitae of THUY T. LE

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EDUCATIONAL BACKGROUND

- 1990: Ph.D. in Engineering, University of California, Berkeley, California, USA
- 1987: M.S. in Engineering, University of California, Berkeley, California, USA
- 1985: B.S. in Engineering, University of California, Berkeley, California, USA

PROFESSIONAL POSITIONS

- 2001 to date: Electrical Engineering Depart., San José State University, California, USA.
Research Area: Digital/Embedded Systems & SoC Design & Verification, Real-time Machine Learning
 - 2017 to date: *Professor & Department Chair*
 - 2010 - 2017: *Professor, Associate Chair & Graduate Advisor*
 - 2006 - 2010: *Professor & Undergraduate Advisor*
 - 2001 - 2006: *Associate Professor*
- 2001 - 2010: *Senior Consultant*, Fujitsu, California, USA
- 1994 - 2000: *Senior R&D Engineer*, Fujitsu, California, USA
- 1989 - 1996: *Independent Consultant*, Sierra Nuclear Corp., California, USA
- 1990 - 1994: *Senior Research Engineer*, Scientific Computation Division, Savannah River National Laboratory, South Carolina, USA
- 1991 - 1993: *Adjunct Professor*, Mathematical Science and Engineering Department, University of South Carolina, USA
- 1987 - 1990: *Physics Instructor*, Department of Applied Art and Science, College of Alameda, California, USA
- 1987 - 1990: *Graduate Student Instructor*, University of California at Berkeley, USA
- 1988 - 1990: *Assistant Research Scientist*, Amorphous Silicon Research Group, Lawrence Berkeley National Laboratory, California, USA
- 1985 - 1988: *Nuclear Reactor Operator & Health Physicist Assistant*, Nuclear Engineering Department, University of California at Berkeley, USA

SOME AFFILIATIONS IN THE PAST 15 YEARS

- Invited Speaker at many large organizations and events such as Asian American Alliances, American Nuclear Society Banquets, and Center for Strategic and International Studies, etc.
- Technical Program Committee of 2013 International Journal of Computing and Digital Systems, 2013 and 2012 International Conference on Communications and Electronics, 2010 Solid State System Symposium, 2006, 2005, and 2004 Grid Benchmark Workshops at the International Parallel and Distributed Processing Symposia, 2006 IEEE/ACIS International Conference on Computer and Information Science, 2005 IEEE/ACIS International Conference on Software Engineering Research, Management & Applications, 2002 International Conference on Parallel and Distributed Processing Techniques and Applications, 1997 International Conference in Mathematic, Computation, and Supercomputer in Nuclear Application

- Technical Program Chair of the 2010 International Conference on Nuclear Power Plant Technology and Safety, 2007 IEEE International Conference on Computer and Information Science, 1997 Vacets Technical International Conference
- General Chair of 2001 Annual Meeting For The Vietnamese North-American University Professors Network, 2000 Vacets Technical International Conference
- Technical Reviewer of the 2013 International Journal of Computing and Digital Systems, 2005 Journal in World Innovations in Engineering Education and Research, International Journal of Computers and Applications, 2006 IEEE/ACIS International Conference on Computer and Information Science, 2005 and 2006 International Conferences on Computing, Communications, and Control Technologies, 2005 IEEE/ACIS International Conference on Software Engineering Research, Management & Applications, 2005 World Multi-conferences on Systemics, Cybernetics, and Informatics, 2004 International Conferences on Computing, Communications, and Control Technologies, 2004 and 2003 World Multi-conferences on Systemics, Cybernetics, and Informatics
- Founding member of the Strategic Alliance Vietnamese Ventures International (Savvi)
- Chairman of Board of Director of the United States-Vietnam Foundation

PUBLICATIONS IN THE PAST 15 YEARS

More than 60 technical papers and government reports in areas of digital circuit & SOC design and verification, parallel and distributed computing, microprocessor & computer architectures, computational sciences, engineering curriculum assessment and development.

PROFESSIONAL BIOSKETCH

Thuy T. Le received his Ph.D. (1990), M.S. (1987), and B.S. (1985) degrees all from the University of California at Berkeley. Presently he is a Professor and Department Chair of Electrical Engineering Department at San José State University. He joined San Jose State University in 1996, the oldest public university in California and the top provider of engineering, science and business graduates to Silicon Valley. As a Department Chair, Dr. Le is responsible for the quality of its educational programs and the operation of the department with more than forty professors and lecturers and more than one thousand undergraduate and graduate students. His teaching and research interests are in the areas of embedded system design, system on chip design and verification, microprocessors and computer architecture, real-time machine learning, and implementation of hardware accelerators for complex computational systems. Besides teaching and administrative activities, Dr. Le has worked on several R&D projects for the National Science Foundation and local companies. These projects are in the areas of high-performance system architecture, digital arithmetic algorithms and circuit design, System-on-Chip verification and validation, parallel and high-performance computational algorithms.

During the period of 2001 to 2010, Dr. Le has served as a consultant for Fujitsu America, Inc. in the areas of high-performance computing and grid architectures. From 1994 to 2000, he was a Senior R&D Engineer of High-Performance Computing Division at Fujitsu America, Inc. He conducted many research and design projects in the areas of vector processors, multi-processor system and interconnects, parallel computer architecture and parallel programming, parallel and

distributed computational algorithms used in combustion engineering, fluid dynamic, and vehicle crash worthiness.

From 1990 to 1994, Dr. Le was a Senior Research Engineer in the Scientific Computation Division at Savannah River National Laboratory, and an Adjunct Professor in the Mathematical Department at the University of South Carolina. During the time at Savannah River Laboratory, he co-authored several high-performance computational nuclear physics and radiation shielding codes developed for the U.S. Department of Energy. These codes included the three-dimensional parallelized and vectorized reactor design code (GRIMHX3), the improved collision probability assembly resonance treatment code (MARJORI), the three-dimensional radiation shielding analysis code (ROOMDOSE), and the two-dimensional generalized geometry discrete ordinates code. Dr. Le was also a member of the Quality Assurance Team which was responsible for the verification and validation of the production computer codes in use at Savannah River Site. These codes included the nuclear fuel cycle and spent fuel analysis codes, reactor safety analysis systems, and the reactor charge design codes.

During the periods of 1993 to 1996 and 1989 to 1990, Dr. Le was an Independent Consultant of Sierra Nuclear Corporation, California. In this position, he served as an Independent Technical Reviewer to review and give comments on documents and reports in the areas of nuclear fuel storage calculations, cask design, and criticality analysis for the transportation of nuclear spent fuels. During the period of 1985 to 1988, he worked as a Reactor Operator and Nuclear Health Physicist Assistant for the Triga Mark III nuclear research reactor at the University of California, Berkeley.

From 1987 to 1990, Dr. Le was a Physics Instructor at University of California Berkeley and California College of Alameda and was also a Research Assistant in the Physics Department at Lawrence Berkeley National Laboratory. While there, he participated in a large DOE funded research project in hydrogenated amorphous silicon for radiation detectors, which included the studies of hydrogenated amorphous silicon structure, very low noise preamplifier, radiation effects on semiconductor, and high-energy electromagnetic shower simulation. During the period of 1986 to 1990, he also performed another research project in high-performance computational nuclear reactor physics in the Nuclear Engineering Department at University of California Berkeley. In this project, he developed a mathematical nodal model that can speed-up the solutions of three-dimensional neutron diffusion problems in nuclear reactor cores. He successfully prototyped and benchmarked his work by implementing three-dimensional neutron diffusion with thermal-hydraulic feedback code running on a 64KB IBM PC-XT.

Dr. Le has served as General Chair, Technical Program Chair, Session Chair, Reviewer, and Committee Member of a number of technical international conferences, symposia, and Journals. He has been invited to give speeches at many national and international events in the U.S and Asian countries such as Japan, Singapore, Thailand, etc. His publications include more than 60 technical papers and government reports in areas of digital circuit & SOC design and verification, parallel and distributed computing, microprocessor & computer architectures, computational sciences, engineering curriculum assessment and development. Dr. Le is a Co-founder and Advisor of Vietnamese Strategic Venture Network and Chairman of the United States-Vietnam Foundation.