

Thomas Sterling
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Brief Biography

Dr. Thomas Sterling holds the position of Professor of Intelligent Systems Engineering at the Indiana University (IU) School of Informatics, Computing, and Engineering as well as serves as the PI of the Continuum Computing Architecture Project at the Department of Intelligence Systems Engineering. Since receiving his Ph.D from MIT in 1984 as a Hertz Fellow, Dr. Sterling has engaged in applied research in parallel computing system structures, semantics, and operation in industry, government labs, and academia. Dr. Sterling is best known as the "father of Beowulf" for his pioneering research in commodity/Linux cluster computing for which he shared the Gordon Bell Prize in 1997. He led the HTMT Project sponsored by multiple agencies to explore advanced technologies and their implications for high-end computer system architectures. Other research projects in which he contributed included the DARPA DIVA PIM architecture project with USC-ISI, the DARPA sponsored HPCS program Cray-led Cascade Petaflops architecture, the Gilgamesh high-density computing project at NASA JPL, and DOE and DARPA projects exploring the ParalleX execution model and the HPX family of runtimes systems based on it for improvements in scalability and efficiency through dynamic adaptive processor control. Most recently Sterling was a faculty researcher of the IU Center for Research in Extreme-Scale Computing (CREST) at which he served as Director for the last two years. Professor Sterling is currently involved in research associated with the innovative Continuum Computer Architecture for extreme scale computing to establish the foundation principles guiding the development of future generation exascale computing systems exploiting non von Neumann concepts using active memory to accelerate computing beyond Moore's Law. Thomas Sterling holds the position of President for the new start-up company, Simultac LLC. In addition, he is the co-author of seven books and holds six patents. He was the recipient of the 2013 Vanguard Award and is a Fellow of the AAAS. Most recently, he co-authored the introductory textbook, "High Performance Computing", published by Morgan-Kaufmann in December, 2017.