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S. J. Ben Yoo is a Distinguished Professor at the University of California at Davis (UC Davis). He is currently leading the 3D EPIC AI Project and the UC Davis part of Northwest-AI Microelectronics Commons Hub under the US CHIPS and Science Act, the ExPlor Project under AFOSR support, the NanoHybrid Photonic Processing Activity under Department of Energy's Micro Microelectronics Science Research Center support, and the NaPSAC project under DARPA support. His research at UC Davis includes 2D/3D photonic integration for future computing, cognitive networks, communication, imaging, and navigation systems, micro/nano systems integration, and the future Internet. Prior to joining UC Davis in 1999, he was a Senior Research Scientist at Bellcore, leading technical efforts in integrated photonics, optical networking, and systems integration. His research activities at Bellcore included the next-generation Internet, reconfigurable multiwavelength optical networks (MONET), wavelength interchanging cross connects, wavelength converters, vertical-cavity lasers, and high-speed modulators. He led the MONET testbed experimentation efforts, and participated in ATD/MONET systems integration and a number of standardization activities. Prior to joining Bellcore in 1991, he conducted research on nonlinear optical processes in quantum wells, a four-wave-mixing study of relaxation mechanisms in dye molecules, and ultrafast diffusion-driven photodetectors at Stanford University (BS'84, MS'86, PhD'91, Stanford University). Prof. Yoo is Fellow of IEEE, OSA, NIAC and a recipient of the DARPA Award for Sustained Excellence, the Bellcore CEO Award, the Mid-Career Research Faculty Award (UC Davis), the Senior Research Faculty Award (UC Davis), and numerous best paper awards from IEEE, ACM, and Optica conferences.