

[Paul Smolensky](#) is the Krieger-Eisenhower Professor of Cognitive Science at Johns Hopkins University and a Senior Principal Researcher in the Deep Learning Group at Microsoft Research Redmond. His work focuses on the integration of symbolic and neural network computation for modeling reasoning and, especially, grammar in the human mind/brain. This work created: Harmony Networks (a.k.a. Restricted Boltzmann Machines); Tensor Product Representations; Optimality Theory and Harmonic Grammar (grammar frameworks grounded in neural computation, developed jointly with A. Prince and G. Legendre); and Gradient Symbolic Computation. The work up through the early 2000's is presented in the 2-volume MIT Press book with G Legendre, *The Harmonic Mind*. He received the 2005 David E. Rumelhart Prize for Outstanding Contributions to the Formal Analysis of Human Cognition.