A Computer Scientist Thinks about the Brain

Abstract:

Understanding the ways in which the Brain gives rise to the Mind (memory, behavior, cognition, intelligence, language) is the most challenging problem facing science today. As the answer seems likely to be at least partly computational, computer scientists should work on this problem — except there is no obvious place to start. I shall recount recent work (with W. Maass and S. Vempala) on a model for the formation and association of memories in humans, and reflect on why it may be a clue about language.