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Autore	Burger John Robert <1940->
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Nota di contenuto	Preface -- 1. Brain Structure -- 2. Brain Architecture For An Intelligent Stream Of Consciousness -- 3. Circuit Elements Required For Neural Systems -- 4. Long Term Memory, Simulated Qubits, Physical Qubits -- 5. Outline of a Cue Editor -- 6. Plans For A Recall Referee -- 7. Arithmetic Using Simulated Qubits -- 8. Long Term Memory Neural Circuits, Fast And Precise -- 9. Neuroquantology, The Ultimate Quest -- 10. The Phase Of The "1" -- Post Script -- Appendix 1 -- Appendix 2 -- Listing Of Sample WinSpice Code.
Sommario/riassunto	Brain Theory From A Circuits And Systems Perspective offers a theory of human consciousness as a natural result of pulsating neurons and synapses within a complex circuit. The book summarizes the electrical, as opposed to the chemical, nature of a brain, and so moves away from customary molecular biology- and biochemistry-focused explanations for consciousness. The book goes beyond the usual structures of artificial neural networks; employing first principles, a particular physical system is synthesized for conscious short term memory, as well as for associative (subconsciously edited) long term memory. It pursues the search for deeper computational power: Where ordinary concepts of logic fail to explain inspired choices concerning artistic appraisal, truth judgment, and understanding, pulsating qubit logic unleashes a fresh avenue for connectivity. Neuroquantology is discussed, including electron tunneling as a regulator of neural

actions, and proposed quantum computing within microtubules. This thought provoking work led the author to reveal neurons with qubit properties, or simulated qubits. Simulated qubits do not require a coherent quantum system, and so remain robust for massively parallel controlled toggling and probabilistic computations. Brain Theory From A Circuits And Systems Perspective is supported with physical circuit examples, end-of-chapter exercises, and neuron simulation experiments, and will be valuable to anyone interested in neuro-circuits, neuro-systems and qubits.