The Digital Patient: Advancing Healthcare, Research, and Education (Wiley Series in Modeling and Simulation)

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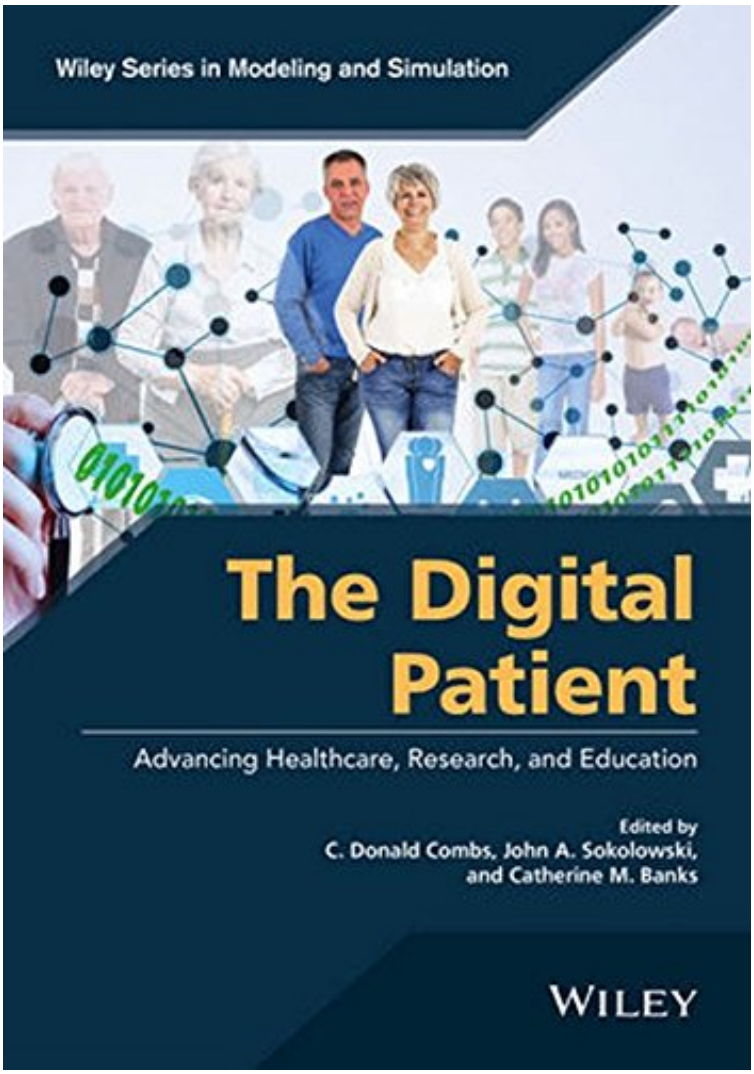

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From Wiley : The Digital Patient: Advancing Healthcare, Research, and Education (Wiley Series in Modeling and Simulation) before purchasing it in order to gage whether or not it would be worth my time, and all praised The Digital Patient: Advancing Healthcare, Research, and Education (Wiley Series in Modeling and Simulation):

A modern guide to computational models and constructive simulation for personalized patient care using the Digital Patient The healthcare industryrsquo;s emphasis is shifting from merely reacting to disease to preventing disease and promoting wellness. Addressing one of the more hopeful Big Data undertakings, The Digital Patient: Advancing Healthcare, Research, and Education presents a timely resource on the construction and deployment of the Digital Patient and its effects on healthcare, research, and education. The Digital Patient will not be constructed based solely on new information from all the ldquo;omicsrdquo; fields; it also includes systems analysis, Big Data, and the various efforts to model the human physiome and represent it virtually. The Digital Patient will be realized through the purposeful collaboration of patients as well as scientific, clinical, and policy researchers. The Digital Patient: Advancing Healthcare, Research, and Education addresses the international research efforts that are leading to the development of the Digital Patient, the wealth of ongoing research in systems biology and multiscale simulation, and the imminent applications within the domain of personalized healthcare. Chapter coverage includes: The visible human The physiological human The virtual human Research in systems biology Multi-scale modeling Personalized medicine Self-quantification Visualization Computational modeling Interdisciplinary collaboration The Digital Patient: Advancing Healthcare, Research, and Education is a useful reference for simulation professionals such as clinicians, medical directors, managers, simulation technologists, faculty members, and educators involved in research and development in the life sciences, physical sciences, and engineering. The book is also an ideal supplement for graduate-level courses related to human modeling, simulation, and visualization. nbsp;

From the Back CoverA modern guide to computational models and constructive simulation for personalized patient care using the Digital Patient The healthcare industryrsquo;s emphasis is shifting from merely reacting to disease to preventing disease and promoting wellness. Addressing one of the more hopeful Big Data undertakings, The Digital Patient: Advancing Healthcare, Research, and Education presents a timely resource on the construction and deployment of the Digital Patient and its effects on healthcare, research, and education. The Digital Patient will not be constructed based solely on new information from all the ldquo;omicsrdquo; fields, which includes systems analysis, Big Data, as well as the various efforts to model the human physiome and represent it virtually. The Digital Patient will be realized through the purposeful collaboration of patients as well as scientific, clinical, and policy researchers, from both their own research and through the development of an effective framework into which their research will fit. The Digital Patient: Advancing Healthcare, Research, and Education addresses the international research efforts that are leading to the development of the Digital Patient, the wealth of ongoing research in systems biology and multi-scale simulation, and the imminent applications within the domain of personalized healthcare. Chapter coverage includes: The visible human The physiological human The virtual human Self-quantification Research in systems biologynbsp; Visualization Multi-scale modeling Computational modeling Personalized medicinenbsp; Interdisciplinary collaborationnbsp; The Digital Patient: Advancing Healthcare, Research, and Education is a useful reference for simulation professionals such as clinicians, medical directors, managers, simulation technologists, faculty members, and educators involved in research and development in the life sciences, physical sciences, and engineering. The book is also an ideal supplement for graduate-level courses related to human modeling, simulation, and visualization.nbsp; C. Donald Combs, PhD, is Vice President and Dean of the School of Health Professions at Eastern Virginia Medical School and is also a senior faculty member in the Department of Modeling, Simulation, and Visualization Engineering at Old Dominion University.nbsp;nbsp; John A. Sokolowski, PhD, is Associate Professor and Executive Director of the Virginia Modeling, Analysis, and Simulation Center at Old Dominion University.nbsp;nbsp; Catherine M. Banks, PhD, is Research Associate Professor at the Virginia Modeling, Analysis, and Simulation Center at Old Dominion University.