



Developing Random Virtual Human Motions and Risky Work Behaviors for Studying Anthropotechnical Systems

By Department of Health and Human Services: Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health (NIOSH)

Bibliogov, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.A computer model was created that generates contact data by means of simulation while altering several variables associated with the machine and its operator. These variables include work environment, the operator s anthropometry, work posture, choice of risky work behavior, and the machine s appendage velocity. In the model, a contact means two or more objects intersecting or touching each other, e.g., the appendage colliding with the operator s hand, arm, head, or leg. This report documents the code development of special features of the computer model, random virtual human motions and behaviors, which made it possible for researchers to study hazardous interactions, such as contacts between the operator and machine. The original idea for random virtual human motions began with the need for a model that, when simulated, would experimentally mimic machine and human actions that could cause actual injuries or fatalities in the workplace. Injury incident investigation reports do not usually contain enough information to aid in studying this problem, and lab experiments with human subjects are also not feasible because of safety issues and ethical...

Reviews

Merely no words to spell out. It is amongst the most awesome publication i have read. Your life span will likely be transform as soon as you full reading this book.

-- **Marvin Okuneva**

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-- **Zachery Mertz**