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Santos Warfighter Program Welcomes SPAWAR Atlantic

SantosHuman Inc. is proud to welcome Space and Naval Warfare Systems Command, Systems Center Atlantic (SPAWAR Atlantic) to its Santos Warfighter Program, which provides the U.S. Department of Defense (DoD) with access to Santos technologies at a significant reduction in cost. This program exists in recognition that the DoD has provided over 60 percent of the more than $50 million in externally funded research in digital human modeling and simulation at the University of Iowa, which has continued from 2003 through today. SantosHuman Inc. is the spin-out company with the worldwide, exclusive license to commercialize this technology.

The Human Systems Integration (HSI) group within SPAWAR Atlantic is embracing the state-of-the-art technology offered by Santos Pro in efforts to witness a return on DoD investment, increase modeling accuracy, reduce unnecessary expenditures and establish a system that is adaptable to future variables.

“The DoD has invested millions of dollars in Santos for research funding. It only makes sense to capitalize on the results of that investment by applying the technology to optimize the environments in which our warfighters work,” said Deborah Swain, Director of HSI at SPAWAR Atlantic.

“We work with some of the most recognizable companies in the world to provide virtual human-in-the-loop trade-off analysis that can inform and support design decisions at the earliest stages of product development,” said Steve Beck, President & CEO of SantosHuman Inc. “But our software can also be used to evaluate legacy equipment for modifications that may be needed in order to support changing task requirements and a wider range of operator sizes—the primary focus for Swain’s Human Systems Integration group.”

Many commands currently utilize older, non-predictive digital human tools that lack the fidelity and precision that HSI experts from various commands consider necessary.

“SPAWAR’s current human modeling tools lack the ability to provide valid results when presented alone,” said Swain. “In many cases, experts end up repeating the evaluations utilizing physical prototypes because the tool's results aren't consistently valid or trusted.”

Using the complex algorithms and simplified interface offered by Santos Pro, HSI professionals at SPAWAR will now be able to create more advanced and accurate models that can virtually assess existing vehicles, weapon systems and other warfighter-operated equipment through task-based, warfighter-in-the-loop trade-off analysis.

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SPAWAR will utilize SantosHuman technology to make recommendations for modifying military equipment to accommodate modern warfighters.

"Adopting a predictive digital human model provides an opportunity to significantly reduce expenditures of taxpayer funds on traditional trial-and-error approaches which require iterative prototyping," said Beck. "By reducing the need for expensive and time-consuming prototyping, we reduce the costs of both materials and labor required to develop physical prototypes, especially when weapon systems aren't readily available for testing."

"The time required to conduct analysis will be shortened to the time required to pull a platform's CAD model into Santos, incorporate digital warfighters and make the digital assessments," said Swain.

The results of these warfighter-centric trade-off analyses will not only identify where changes to existing systems are required, but will also show how warfighter performance will vary relative to proposed changes to the design. Beck said this is critical in making recommendations for modifying vehicles, weapon systems and equipment throughout the US DoD to accommodate the modern warfighter population and their increasingly sophisticated, difficult missions.

About SantosHuman
SantosHuman Inc. provides virtual human-in-the-loop solutions to some of the most recognizable global companies in the world. The software offers the only existing comprehensive approach to predicting physical human behavior and performance that can consider strength, fatigue, flexibility, balance, vision, body-borne equipment, external forces and environmental conditions. Learn how to prevent your product's failure in the market at the earliest stages of design at www.santoshumaninc.com.