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Nipissing University Partners with SantosHuman Inc. to Study Hand Injuries

Nipissing University's School of Physical and Health Education in Ontario, Canada will study hand-related workplace injuries through the use of predictive virtual human modeling and simulation software. These first-of-their-kind capabilities will be provided to the Santos® Institute's latest research partner through its Santos® University Program.

"I am delighted to partner with SantosHuman Inc. The integration of Santos technologies in our lab spaces will greatly enhance education and research opportunities for our students at Nipissing University," said Dr. Aaron Kociolek, Assistant Professor in Biomechanics and Ergonomics.

Dr. Kociolek will utilize SantosHuman Inc. (SHI) software in his study of biomechanics and control of the hand, which is funded by the National Sciences and Engineering Research Council of Canada. Dr Kociolek and his research partners will also continue their work to evaluate musculoskeletal injuries of hand-intensive work within the agricultural industry, which is funded by the Workers Compensation Board of Manitoba.

"In addition to the continued involvement with a growing variety of academic institutions and exciting student projects, the Santos Institute looks forward to working closely with Dr. Kociolek and Nipissing University in the field of hand modeling and predictive grasping," said Dr. Tim Marler, Chief Research Officer and Director of the Santos Institute. "We have created novel capabilities for predicting hand grasps, and Dr. Kociolek's work with mechanical interrelationships within the hand will be very helpful in this regard."

Kociolek is also excited to show students how digital human modeling and virtual reality can be used proactively in the initial design phase of a workplace. "This proactive approach is a fundamental shift in how we do ergonomics, allowing us to optimize worker efficiency and minimize injury risk before a job actually exists," he said.

Nipissing University will integrate Santos technologies into the curricula for Ergonomics and Advanced Biomechanics for undergraduates and Biomechanical Modeling for graduate students. The Santos University Program provides opportunities to learn about workplace design, body dynamics and physical working behaviors by using the predictive human simulation capabilities available within SHI's software products.

"Having SantosHuman modeling capabilities will further strengthen the experiential learning focus of our program and ensure students have the technological skill set that is desirable to employers in human factors and ergonomics," Dr. Kociolek added.

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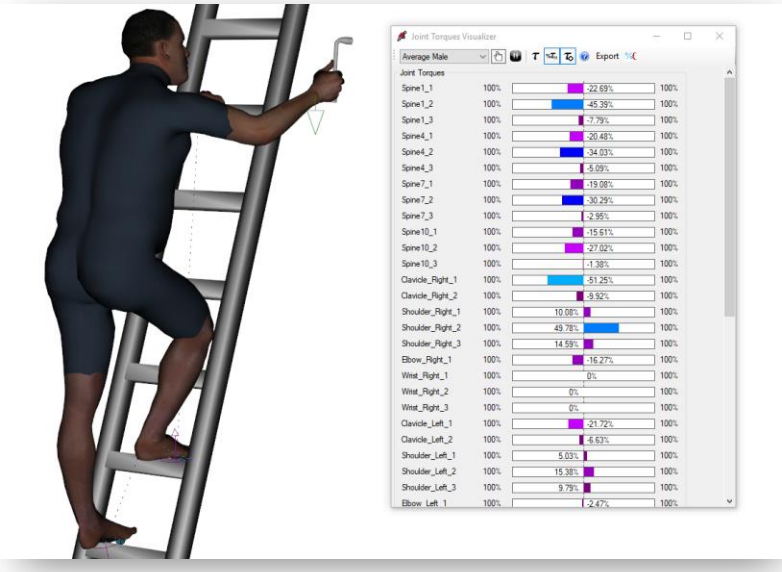

Researchers at Nipissing University will study hand injuries in the workplace using SantosHuman software.

SHI's research partnerships in Europe and North and South America now include University of California-Berkeley, Oregon State University, Politecnico di Milano, Pontificia Universidad Javeriana, the University of Waterloo, the University of Ontario Institute of Technology and Brock University.

Related links:

Dr. Aaron Kociolek's research program, current projects, and publications
Home page of Nipissing University
Nipissing's Bachelor of Physical and Health Education home page
Nipissing's Masters of Science in Kinesiology home page

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About the Santos® Institute
Provided through the ***Santos® Institute***, the **Santos® University Program** is designed to complement and contribute to projects, courses, and curricula related to:

- Industrial Design
- Computer science
- Digital Human Modeling
- Simulation
- Engineering
- Occupational Health & Safety
- Ergonomics
- Human Factors
- Objective Analysis of Motion Capture
- Biomechanics
- Robotics (the foundation of the Santos® predictive models)

Contact the ***Santos® Institute*** at institute@santoshumaninc.com to participate in the Santos® University Program.

About SantosHuman
SantosHuman Inc. provides virtual human simulation 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 more at www.santoshumaninc.com.