

Advancing Tools & Visualization Techniques for Representing Modeled Ecosystem Service Outcomes in Simulated Multi-player Game Environments

Award Year:

2012

Principal Investigator:

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Associated Program:

[Propose a Workshop](#) [1]

Collaborative Site:

[Group Collaboration](#) [2]

Repository:

[Online Repository](#) [3]

Researchers will convene a workshop to build a prototype system that combines elements of choice modeling, ecosystem modeling, and interactive multiplayer games all focused on capturing the economic value individuals on alternative levels and qualities of ecosystem services. Participants will develop a novel tool that will involve an interactive gaming platform linked to an ecosystem simulation model. This will allow individuals to “play” the system to create their version of the “best” landscape. Various metrics would be tested to represent how different landscape outcomes in terms of ecosystem services resonate with players. Since the model embeds the trade-offs between, for example, better ecosystem functioning and more population and urban land use, the choices the players make will reflect how they value these tradeoffs. Unlike conventional choice experiments, this new approach will allow the players to create their own scenarios. Rather than working with a fixed set, preferences will emerge as a result of group interactions. By playing the game, players will also become informed about the trade-offs in a much more tangible way than through simple description. The system thus connects the best of choice experiments, social interaction, and dynamic modeling. The workshop is part of a larger initiative to provide useful input to decision-making and creates the added opportunity to engage specialists in human-computer interfaces with psychologists, marketers, game designers, modelers, and policy-makers to enhance approaches for generating collective intelligence through interactive gaming.

Participants:

Jim Boyd, SESYNC and RFF

Karim Chichakly, ISEE Systems

Robert Costanza, Australian National University

Virginia Dale, Oak Ridge National Lab

Steve Farber, University of Pittsburgh

David Finnigan, Boho Interactive

Kathie Grigg, University of Queensland

Scott Heckbert, University of Alberta

Ida Kubiszewski, Australian National University
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Richard Tran Mills, Climate Change Science Inst @ORNL
Lisa Waigner, University of Maryland
Rick Ziegler, US EPA

Source URL: <https://www.sesync.umd.edu/representing-in-game-environments>

Links

[1] <https://www.sesync.umd.edu/workshops>

[2] <http://community.sesync.org/node/155>

[3] <https://files.sesync.org/>