CoMSES Digest: Spring 2021

Volume 9, No. 1   December 15, 2020 – March 15, 2021

Table of Contents:

Editor's Note

Welcome to the Spring 2021 issue of the CoMSES Digest! This is our first issue without the editorial acumen of Dr. John T. Murphy who stepped down earlier this year to focus on other opportunities. We are grateful for his leadership and contributions to CoMSES Net over the past decade.

The CoMSES Net team has been working closely with the Science Gateways Community Institute and our partners to sustain and enhance our operations and ensure that we can continue to serve the community for the long-term. Technical details and steps we've taken along the way have evolved over the years and will continue to evolve in response to a changing scientific and societal landscape but our long-term mission remains focused on improving the way we do modeling science with lightweight, community-driven approaches to

discover, develop, and promote good practices for modeling science and to build supporting cyberinfrastructure that reduces the friction to adopt good practices.

Please use our contact form or GitHub issue tracker to send us feedback and suggestions or to report bugs and issues with our services. Our Discourse forums can also be used for community discussions and to coordinate special interest working groups. In the near future our development roadmap will be focused on improving our peer review processes and the overall usability and accessibility of the CoMSES Net Science Gateway.

On behalf of the CoMSES Net executive board and team, thank you for being a part of CoMSES Net!

Best regards,
Allen Lee, CoMSES Net Co-Director and Interim Digest Editor

CoMSES News

CoMSES Winter School

CoMSES Net hosted its fifth International Winter School on Agent Based Modeling of Social Ecological Systems on January 4-15, 2021. The Winter School was held entirely online which made international participation easier (no need for visas and approvals) while presenting challenges for collaboration (timezone differences, distributed teams). Over 40 graduate students, postdocs, and faculty joined the Winter School and worked with our tireless mentors on projects related to urban vulnerability, hurricane evacuations, malaria, rangeland grazing, and archaeological faunal assemblages. The virtual format combined recorded Zoom (guest) lectures on social and ecological sciences, hands-on sessions on best practices for computational modeling and a crash course on Git and GitHub, and group projects with individual instructors building on models from existing projects. Online collaboration was facilitated by shared Zoom rooms, Slack channels, GitHub, and wonder.me. Participants presented their group projects on the last day of the school and all made substantive contributions to their projects despite the challenges of distributed and often-times asynchronous collaboration.

Thanks to all of our participants and mentors for their patience and perseverance as we piloted the new online format!

Special Issue: Large-scale behavioural models of land use change in SESMO

Dear colleagues,

We would like to invite you to contribute to the special issue on "**Special Issue: Large-scale behavioural models of land use change"** for the open access and community driven journal "Socio-Environmental Systems Modelling".

The Special Issue is supported by the joint GLP/AIMES Working Group on large scale behavioural models of land use change and the CSDMS Human Dimensions Focus Research Group.

The expected deadline for the submission of the contribution is the end of June 2021.

Prospective authors are encouraged to submit an extended abstract of max 1000 words by 31 March 2021, indicating the paper objectives and contribution to the literature.

For more information see https://sesmo.org/announcement/view/21

Calendar of Events

Please follow the links to the local event organizers for the latest information or go to https://comses.net/events/ for a listing of all recent events. You can also subscribe to new events by following us on Twitter or subscribing to our RSS Events feed.

Upcoming Deadlines
Social Simulation Conference 2021
Cracow University of Economics, Poland
Submissions due April 30, 2021
https://www.comses.net/events/598/

Winter Simulation Conference 2021
Phoenix, Arizona, USA

Submissions due April 5, 2021
https://www.comses.net/events/595/

Conferences and Workshops

Grand Challenges in Socio-Environmental Systems (SES) Modeling: an Assessment Perspective
April 14, 2021
Online webcast
Join the Integrated Assessment Society, the Socio-Environmental Synthesis Center (SESYNC) and the journal Socio-Environmental Systems Modeling for a live webcast this spring, exploring the Grand Challenges in Socio-Environmental Systems (SES) Modeling: an Assessment Perspective
https://www.comses.net/events/601/

22nd Multi-Agent-Based Simulation (MABS) workshop hosted at AAMAS 2021
May 4, 2021
Virtual event online
https://www.comses.net/events/596/

11th International Conference on Simulation and Modeling Methodologies, Technologies and Applications
July 7-9, 2021
Virtual event online
https://www.comses.net/events/594/

Courses

BEHAVE Online Spring School on Agent-Based Modelling
April 19 - April 23, 2021
Virtual event online
https://www.comses.net/events/593/

Summer school on simulation models eX Modelo
Chatenay-sur-Seine (Paris)
May 30th -June 4th 2021
https://www.comses.net/events/588/

Model Library

Newly Reviewed

Seven models passed CoMSES's peer review process this quarter. Some are still unpublished while their companion publications undergo journal peer review; published ones include the following models:

- *Lethal Geometry* examines whether territory size influences the mortality risk of individuals within the territory (Kristin Crouse)
- *Minding Norms in an Epidemic Does Matter* tries to shed some light on the mutual influence of citizen behaviour and the spread of a virus in an epidemic (Klaus G. Troitzsch)
- *Gender desegregation in German high schools* replicates a model from the 1990s that explores the changes of the percentages of female teachers among the teaching staff in high schools ("Gymnasien") in the German federal state of Rheinland-Pfalz (Kluas G. Troitzsch)
- *AMRO_CULEX_WNV* simulates West Nile Virus dynamics in a one host (American robin) <-> one vector (Culex spp. mosquito) system (Aniruddha Belsare, Jennifer Owen)
- *An agent-based model for brain drain* explores the emigration of highly skilled labour (Furkan Gursoy, Bertan Badur)
- *An agent based model to assess resilience and efficiency of food supply chains* models a generic food chain network between producers, traders, and consumers (Geerten Hengeveld, George Ak Van Voorn)

New Model Uploads

25 new models were published in the CoMSES Model Library on a wide variety of topics that illustrate the depth and breadth of our community. These include:

- an exploration of how Westeros evolved in Game of Thrones
- path dependence in inter-organizational networks
- dynamics of COVID-19 spread and containment
- modeling markets and endogenous housing policies
- global food trade

These models and more can be discovered at the CoMSES Model Library - you can also keep up-to-date with newly published models on our Twitter and RSS feeds.

Most Downloaded Models

12,119 published models were downloaded this quarter, across 855 unique codebases. Here are the top 5:

1. MedLanD Modeling Laboratory by C Michael Barton, Isaac Ullah, Gary Mayer, Sean Bergin, Hessam Sarjoughian, Helena Mitasova
(160 downloads)
2. Evolution of Sex by Kristin Crouse (138 downloads)
3. Dawkins Weasel by Kristin Crouse (126 downloads)
4. Hybrid Agent-Based and Equation Based Model for Infectious Disease Spread by Elizabeth Hunter (126 downloads)
5. Generic servicising model (SPREE project) by Reinier Van Der Veen, Kasper H Kisjes, Igor Nikolic (88 downloads)

---

mailchimp