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NETWORK

CoMSES Digest: Spring 2024

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Editor's Note

Season's greetings from the CoMSES Net team, wishing you a joyful spring!

As a fresh addition to the executive board, I'm delighted to seize this opportunity to reiterate the essence of our community for our new readers. The Network for Computational Modeling in the Social and Ecological Sciences brings together researchers, educators, and professionals who are driven by a common purpose: to advance the development, sharing, utilization, and reusability of agent-based and computational models for the study of social and ecological systems. Our educational initiatives extend beyond the scope of teaching agent-based modeling; they endeavor to establish fresh community standards that promote enhanced scientific practices. These endeavors are geared towards encouraging research transparency and reusability, consequently expanding their influence. I would like to emphasize once again that the CoMSES Model Library stands as the cornerstone of our network, serving as a digital repository committed to enabling discovery, advocating for best practices, and adhering to the FAIR Principles for Research Software.

The CoMSES community thrives and expands thanks to the dedication of our CoMSES team and the active participation of our members. We extend our heartfelt gratitude for your past contributions and ongoing engagement, which are instrumental in shaping the success of our community. To all of you teaching this spring semester, let's cultivate a culture of transparency and reproducibility by encouraging your students to upload their projects to the model library. Together, we'll harvest the benefits of their contributions. Allow me to provide you an insight of the summary metrics on CoMSES Membership, Computational Model Library submissions, and peer reviews since our inception as openabm.org in 2007:

(1)   Membership Growth - Since 2007, CoMSES membership has steadily grown, reflecting increased interest and participation in computational modeling in the social and ecological sciences (>3500 members, including >1200 full members).

(2)   Computational Model Library Submissions - Over the years, the Computational Model Library has seen a significant increase in submissions, indicating a growing community of researchers contributing to the repository (>1100 models (>1600 code bases), and >2000 downloads in 2024 so far).

(3)   Peer Reviews - Peer reviews play a crucial role in maintaining the quality and rigor of the Computational Model Library. Since inception, the number of peer reviews conducted reflects ongoing engagement and commitment to scholarly standards (>180 since 2010).

These metrics underscore the dynamic evolution and vibrant engagement within the CoMSES community since its establishment.

Best regards,
Liliana Perez
CoMSES.Net Guest Editor
University of Montreal

CoMSES News

Board Elections Results

Please join us in welcoming the new Executive Board members for the 2024-2026 term: Roger Cremades and Liliana Perez. We extend our heartfelt gratitude to

Edmund Chattoe-Brown and Nanda Wijermans for their dedicated service on the CoMSES Executive Board over the past three years!

Introducing: A New Research Collaboration

The CoMSES team is working with CUAHSI (Consortium of Universities for the Advancement of Hydrologic Science) and CSDMS (The Community Surface Dynamics Modeling System) to better expand our educational materials. Our respective modeling communities share in a desire to promote new and reproducible modeling techniques to our members. Training and courses developed by CoMSES and our community partners will be shared to expand our educational offerings to all of our members.

Phasing Out Creative Commons Licenses

Starting soon, we will begin phasing out the application of Creative Commons (CC) licenses to code stored in the CoMSES Model Library. This will entail removing the option to select a CC license when archiving and urging authors to consider applying alternative licenses to existing models. While CC licenses are often the most recognizable, they are generally regarded as unsuitable for any type of software. Read more about the reasoning behind this in the Creative Commons FAQ here.

Ongoing Developments

We are currently in the process of automating the DOI minting process for models that have undergone peer review. You can expect this to take effect, including retroactively on previously reviewed models without an assigned DOI, sometime in the next quarter.

Speaking of automation, we have also been focusing efforts on designing machine learning models and systems to aid in the curation and administration of the site, with the ultimate goal of providing workflows that can be used by other science gateways to help tackle some common issues such as spam.

As always, comses.net will continue to be regularly maintained and improved upon by a growing development team. If you have any suggestions for improvement or would like to report an issue, please get in touch via our contact page or by emailing us at support@comses.net.

Update Your CoMSES Profile!

Please consider keeping the CoMSES community informed by updating your user account on CoMSES Net! Let fellow researchers and modelers get to know you by including a biography, research interests, and/or institutional affiliation. Click here to edit your profile and link your account to GitHub and ORCID! As always, feel free to join the conversation by visiting the Forums tab or by starting a discussion on a specific model, event, or job posting.

New CoMSES Digest Segment: Featured Users Spotlight

What do our users use our models for? This was a question raised at the most recent CoMSES Board meeting, and it prompted an idea. Why not start a new segment in our digest to highlight what our users are doing with the models they download. In this first digest issue of 2024 we are asking you - our readers - for your input. Have you used a model downloaded from the gateway? If so - what did you use it for? Why did you select that particular model? Were you more interested in the model as a whole, or did you want to investigate its code, or documentation for a specific function? We would love to hear from you, and feature your thoughts in upcoming digest issues. If you would like to help us better understand our users please complete this brief google form - and maybe you will see your thoughts/experiences in print in a future digest issue!

Calendar of Events

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

13th International Conference on Complex Networks & Their Applications
Dates: December 10, 2024 - December 12, 2024

The 13th International Conference on Complex Networks and their Applications will take place in Istanbul, Turkey , 10-12th December 2024. The abstract submission deadline is 3rd September, 2024. Both full papers (not previously published up to 12 pages) and Extended Abstracts (about published or unpublished research up to 4 pages) are welcome

Autonomous Agents and Multiagent Systems (AAMAS 2024): Call for Participation
Dates: May 6 - 10th, 2024

The 23rd International Conference on Autonomous Agents and Multiagent Systems (AAMAS 204) will be held between May 6th and 10th, 2024. The conference is currently inviting for early registration by 11th April, 2024. Details about the keynotes will be published on the conference website as they become available.

Model Library

Newly Reviewed

6 models passed CoMSES's peer review process this quarter!

CoMSES is always looking for new model reviewers! As such we warmly welcome your self nomination. If you would like to join our reviewer network, we invite you to complete This Form.

New Model Uploads

Fifteen 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:

- Understanding the role of diversity in team performance.
- Illustrating the mechanisms of infection dissemination within healthcare units by modeling the spread of C.Difficile in Hospitals.
- Modeling the impacts of government policies on the adaptability of farmers
- Understanding how information propagation impacts decision making regarding COVID-19 vaccine uptake
- Modeling a dynamic grassland environment to test impacts of environmental dynamics and human predation on megafauna extinctions.

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

Published models were downloaded a total of 2343 times this quarter, across 561 unique codebases. Here are the top five:

1. The Dawkins Weasel Netlogo Model by Kristin Crouse (212 downloads)
2. Evolution of Sex by Kristin Crouse (193 downloads)
3. Learning Extension - RAGE RAngeland Grazing Model by Cristina I. Apetrei, Nikita Strelkovskii, Nikolay Khabarov, Valeria Javalera Rincón (97 downloads)
4. Hybrid individual- and particle-based simulation model and data on air pollutants and vertical greenery systems in the city of Yerevan, Armenia by Andranik Akopov (49 downloads)
5. An agent-based model of cultural change for a low-carbon transition by Daniel Torren-Peraire (49 downloads)

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CoMSES Net is headquartered in The School of Complex Adaptive Systems
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