

A Network-of-Networks Collaboratory to Address the Grand Challenge of the Future of Information Work at the Human-Technology Frontier

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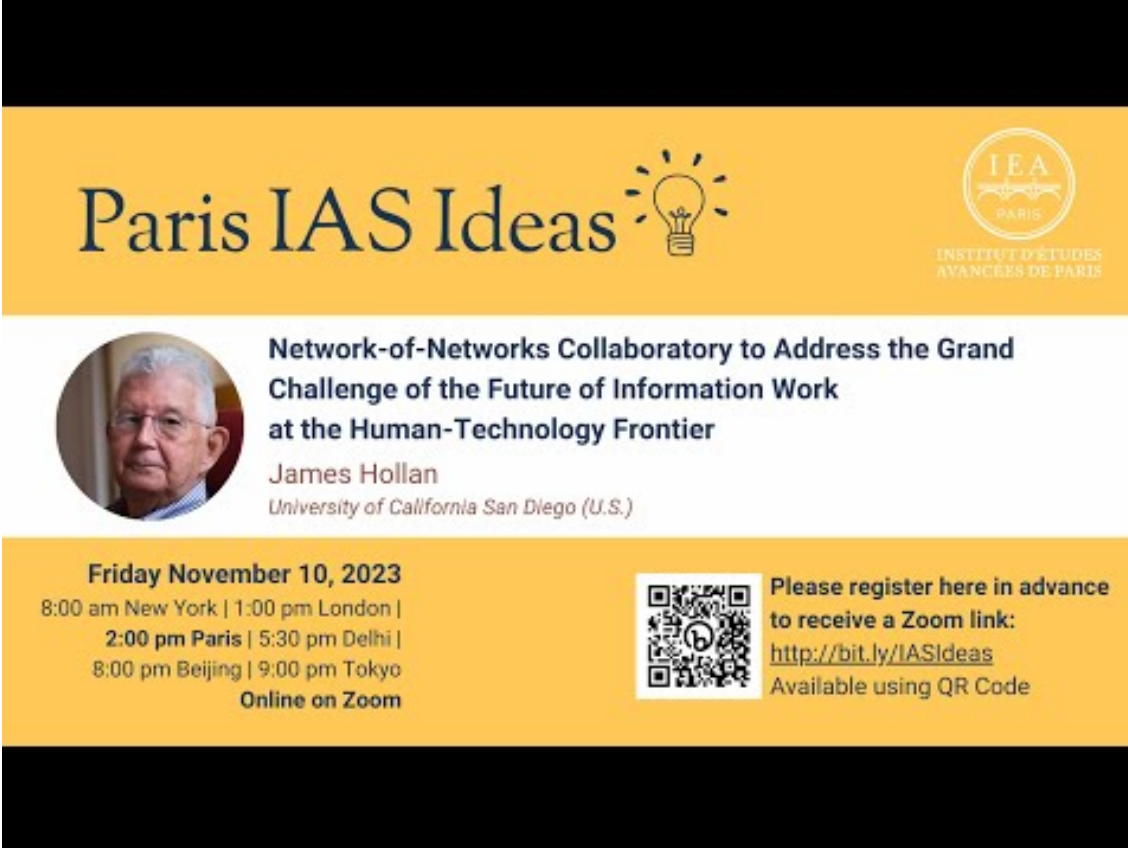
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ABSTRACT

Cinquième séance du cycle de conférences "Paris IAS Ideas", avec la participation de Jim Hollan, Université de Californie, San Diego, chercheur-résident de l'IEA de Paris

The CDIW focuses on designing human-centered information spaces. This is both an idea, and a computational environment. It is the idea of a spatial cognitive workspace---a desktop for intellectual activity---reified as a computational environment that actively supports the coordination of information-based work. Specifically, the information environment should develop awareness of the history and structure of a user's action: how she accomplishes activities through discrete tasks across devices, programs, and working sessions. Through use, information in the environment accumulates structure and context: not only who accessed it and when, but concurrent activity and semantic relationships to other related information and activities. The context and history of activity should drive the behavior of information. To the user, her information should seem alive, have awareness, know where it came from, how it got there, what it means--and behave accordingly. It is important to emphasize that the human-centered information space will not replace the user's ecosystem of documents and applications, but be a separate space linked to them, acting as a home, a control center, a multi-modal but fundamentally 'spatial workshop' where information across applications will

converge with visual features and active behaviors that support the user in not only completing her tasks, but accomplishing overarching activities.



The banner features a black header and footer. The main section has a yellow background. At the top left, the text "Paris IAS Ideas" is written in a serif font, followed by a lightbulb icon. To the right is the IEA Paris logo, which includes the text "INSTITUT D'ÉTUDES AVANCÉES DE PARIS". Below this, on the left, is a circular portrait of James Hollan. To the right of the portrait is the title "Network-of-Networks Collaboratory to Address the Grand Challenge of the Future of Information Work at the Human-Technology Frontier" and the speaker's name "James Hollan" with his affiliation "University of California San Diego (U.S.)". At the bottom, on the left, is the date "Friday November 10, 2023" and a list of times for different locations: "8:00 am New York | 1:00 pm London | 2:00 pm Paris | 5:30 pm Delhi | 8:00 pm Beijing | 9:00 pm Tokyo", followed by "Online on Zoom". On the right is a QR code and the text "Please register here in advance to receive a Zoom link: http://bit.ly/IASIdeas Available using QR Code".

Paris IAS Ideas

INSTITUT D'ÉTUDES AVANCÉES DE PARIS

Network-of-Networks Collaboratory to Address the Grand Challenge of the Future of Information Work at the Human-Technology Frontier

James Hollan
University of California San Diego (U.S.)

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[A Network-of-Networks Collaboratory to Address the Grand Challenge of the Future of Information Work at the Human-Technology Frontier](https://paris.pias.science/article/a-network-of-networks)

Bibliography

Computers". James D. Hollan, T. (2015). SIGCHI Lifetime Research Award. *Proceeding of CHI'15, ACM Conference on Human Factors in Computing Systems, Seoul, Korea*, 817-820,.

Fox, A. R., Guo, P., Klokmoose, C. N., Dalsgaard, P., Satyanarayan, A., Xia, H., & Hollan, J. D. (n.d.). Towards a Dynamic Multiscale Personalized Information Space: Beyond Application and Document Centered Views of Information". *4th International Conference on the Art, Science, and Engineering of Programming*. <https://doi.org/10.1145/3397537.3397542>

Hollan, J. D., Hutchins, E. L., & Carroll, D. K. I. J. M. (Eds.). (2001). Distributed Cognition: Toward A New Theoretical Foundation for Human-Computer Interaction Research". In *Human-Computer Interaction in the New Millennium*, 75–94. Addison-Wesley.