

## Cesar Hidalgo - Center for Collective Learning (CCL)

With the support of an ANITI international attractivity chair, in 2019, we established the Center for Collective Learning (CCL), an interdisciplinary research group working on applications and implications of artificial intelligence. During this initial period, we made important advances in the fields of economic complexity, digital democracy, and human perception of artificial intelligence. In Economic Complexity, we wrote and published the first comprehensive review of the field, a key paper on the policy implications of economic complexity, and developed a multidimensional approach that improves the ability of economic complexity methods to explain international variations in economic growth, inequality, and emissions. In digital democracy, we ran participatory experiments during the 2022 French and Brazilian presidential elections, leading to the creation of software libraries supporting the reproducibility of these efforts, and two papers on divisiveness: a new and important metric in social choice theory. In the study of people's perception of artificial intelligence, we published a comprehensive book with over 80 experiments comparing people's reactions to the actions of machines and humans (How Humans Judge Machines), and a paper showing that some of these differences can be explained by people's mental models of machines. During this period we also grew the support for CCL through 3 European awards, an ERA Chair--a 5-year award supporting the opening of a new branch of CCL at Corvinus University--joining the ELIAS consortia--A Horizon Europe project focused on artificial intelligence for sustainability that gathers some of the most important AI groups in Europe--and the Observatory for the Sea--a European consortia focused on the ocean and climate.

