

Alleviating long-tail problem in gig and creator economy for a more sustainable future of work : A RecSys perspective

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From weaving the information tapestry at Xerox almost three decades ago (Goldberg et al., 1992) for filtering emails and helping ecommerce companies to increase their sales (Schafer et al., 1999; Srivastava et al., 2020), to helping build energy efficient buildings(Himeur et al., 2021), designing smart cities (Quijano-Sánchez et al., 2020) and devise more effective vaccination strategy during Covid-19 pandemic (Adday et al., 2021; Omid et al., 2022), Recommender Systems(RecSys) have undoubtedly evolved exponentially.

During this evolution, RecSys community has also moved beyond focusing on the regular algorithmic accuracy metrics like MAE RMSE etc. to more inclusive measures to incorporate the ideas of diversity , serendipity , fairness etc. (Kaminskas and Bridge, 2016). This has also helped RecSys become more socially responsible and tried to address various ethical challenges it faces (Milano et al., 2020).

Ability to address long-tail problem in various domains has been one of the reasons for such a widespread success and adoption of RecSys across the domains(Sigova et al., 2021).

Currently a paradigm shift is being witnessed across the globe with gig economy becoming an integral aspect of future of work (Bates et al., 2021). Closely related to it is creator economy (Schram, 2020), where digital platforms have empowered ordinary people to create and share their content globally, and have it as their primary sources of income. Quite often these platforms depict the *winner takes all* phenomenon, leaving a long-tail of not so popular individuals behind, whereas existence of middle class is essential for long term sustainability of such platforms and for society as whole(Jin, 2020).

Given the importance of gig economy and creator economy on the future of work, it is quintessential that RecSys community focuses on identifying the characteristics of long-tail effects in these emerging paradigms, and how more equitable recommendation mechanism can be devised to ensure long term sustainability of gig economy and creator economy without creating widespread unemployment and economic disparity in the society.

RecWork 2022: Workshop on Recommender Systems for the Future of Work² is certainly a very timely initiative. I hope the deliberations done during this workshop will steer the RecSys community, to this critical emerging area for global economy and society as whole.

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² <https://shilad.github.io/rec-work-22/>

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