Colin Ndonfack

University of Montreal
3150 Jean-Brillant Street
Montreal (QC), H3T1N8
colin.jaures.ndonfack.zango@umontreal.ca

July 20, 2023

The organizing committee
NBER tutorial on Digital Economics and A.I.

Dear organizers,

It is with great interest and pleasure that I submit this application for attending the coming tutorial on Digital Economics and Artificial Intelligence for economics graduate students who have completed at least two years of Ph.D.

Indeed, I am a Ph.D student in economics at University of Montreal and I am currently ending my fifth year, which means I am starting my sixth year from September 2023. I started the program in 2018, after completing a 3 years Master program in statistics and applied economics at ISSEA institute, in Yaounde, Cameroon. After 2 years taking classes and passing comprehensive exams, I started my Ph.D research studies from fall 2020.

My research interests lie in the empirical industrial organization and related fields. I have a particular taste for empirical analysis of competition and market structures in platform industries, whether digital platforms or not. My current and Job Market Paper is actually on the particular case of video gaming industry. I am working on the following subject: *"dynamic multihoming by content providers in platform-based markets: focus on the US video gaming industry"*. Multihoming pattern has been increasing overtime on some two-sided platform industries, particularly for the video gaming case. Microsoft entering in the industry as a platform (console) provider in 2001 was followed by a long term sharp increase in the share of video games launched on more than one home consoles, mostly Microsoft and Sony consoles. As this observation drew my curiosity, I am exploring the role payed by such a new platform provider entry in the multihoming decision by content providers. At current state of the research, I found that Microsoft absence would have indeed kept the multihoming pattern quite

low. The methodology I use in this research apply to other platform industries such as the online streaming where same contents can be available on more than one platforms. In further development of this research, I intend to analyse the role played by online ratings on the content provision and multihoming.

Moreover, I also have interest in competition and market structure in other tech industries. Indeed, I joined my supervisor, Pr. Mathieu Marcoux, in a study which is aiming at estimating marginal costs when prices and characteristics are discrete, with application in the mobile plan industry.

Beside these research interests which are directly related to my Ph.D dissertation, I also did some A.I. related work during my research assistance or research intern positons: using deep-learning to write an autoencoder-based anomaly detector model in the purpose of identifying noisy samples from a dataset; building an OCR-based algorithm to extract and preprocess data from historical files which were digitized in image formats.

Pending a favorable response, please accept, dear organizers, my very high gratitude.

Sincerely yours,

Colin Ndonfack