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Application for NBER Digital Economics and AI Tutorial

I am writing to express my enthusiasm for the NBER Digital Economics and AI Tutorial. I am a Hispanic fourth-year Ph.D. candidate in economics at Southern Methodist University, with prior studies at the Universidad Adolfo Ibáñez in Chile, I see this tutorial as a valuable opportunity to deepen my understanding of digital economics and artificial intelligence while connecting with researchers who share similar interests.

I have completed core coursework in microeconomics, macroeconomics, and econometrics. Additionally, I have undertaken field courses in urban economics, comparative development, monetary economics, political economy and geography, labor economics, as well as topics in mathematical and information economics.

Most of my knowledge of Digital Economics and AI has been self-taught, complemented by short courses provided by NVIDIA (Fundamentals of Deep Learning and Accelerated Data Science) and Constellate (Introduction to Vector Databases and Semantic Searching, Automated Text Classification Using LLMs, Large Language Models and Embeddings for Retrieval Augmented Generation, s*paCy in the World of LLMs,* and *Small Language Models*).

Committee members:

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Research Interests and Current Work

My primary research interests are in cultural and political economics. I explore how media, particularly entertainment media, shapes political preferences, attitudes toward inequality, and women's participation in the labor market in Latin America. Much of my research focuses on extracting cultural values from text. I analyze telenovela synopses (text summaries of Latin American TV series) to identify key narrative themes.

My first project, "*Drama and Redistribution: The Impact of Telenovelas on Preferences for Redistribution in Latin America,"* investigates the impact of telenovelas depicting social class differences on support for redistributive policies in Latin America. I use three text categorization techniques, including ChatGPT and other NLP methods, to identify telenovelas that depict social class differences or conflicts.

My second project, "*The Disney Princess Effect: Gender Stereotypes and Female Labor Decisions in Latin America,"* investigates how exposure to telenovelas with strong female characters during childhood or adolescence impacts women's labor force participation later in life. During adolescence, women form ideas about gender roles, and exposure to strong, working women on television can shape future career decisions. I plan to use generative AI models (e.g., ChatGPT or Llama 3) to identify telenovelas with female

protagonists and categorize whether they work, where they work (in male- or female-dominated fields), and if they are single mothers.

In future research, I aim to enhance the measurement of cultural values in telenovelas by analyzing (1) episode transcripts to gain a deeper understanding of the cultural content, (2) sound to examine how characters convey emotions through voice, and (3) visual elements to assess how characters express emotions through facial expressions and body language.

The NBER Digital Economics and AI Tutorial will offer valuable insights into applying AI in economic research. By learning from experts, I hope to refine my methods for extracting and interpreting cultural values from media, strengthening the impact of my research.

Further details on completed projects:

Drama and Redistribution: The Impact of Telenovelas on Preferences for Redistribution in Latin America

Abstract:

> This paper investigates the impact of telenovelas depicting social class differences on support for redistributive policies in Latin America. Focusing on the 2012 LAPOP survey data from Chile, we examine the influence of the telenovela Pobre Rico and find a significant decrease in support for redistribution policies by 21% among viewers. To generalize these findings, we employed three Natural Language Processing methods to identify telenovelas that portray social class distinctions. Consistently, we observe a reduction in support for redistribution following exposure to such telenovelas, with all methods yielding smaller effect sizes of 6-8%. The decline in support is primarily driven by a shift in lower-income individuals' perception of their own social class, leading them to believe they belong to the middle class and thus require less government support. This study provides evidence of how entertainment media can shape the (mis)perceptions of inequality, thereby influencing policy preferences.

Sincerely,
Javier Gonzalez