AIRLEAP Virtual Sessions for the 99th WEAI Annual Conference
June 27, 2024, Seattle, Washington, 8:15 AM – 9:45 PM PT

Session #1 Artificial Intelligence and Machine Learning JEL Codes: C4, J6, O3
Organizer: Steven Payson, University of Maryland, College Park
Chair: Brian Sloboda, Brian W. Sloboda, University of Maryland June 27 @ 10:15 AM–12:00 PM

1. Utilizing Artificial Intelligence and Machine Learning to Determine a Prediction Analytics Process for Determining Foundation Giving Gift Capacity

Debra Dwyer, Farmingdale State College SUNY (Presenter);
Jonelle Bradshaw de Hernandez, University of Texas at Austin

The utilization of predictive analytic tools has permeated multiple fields. Fundraising is one such area where the exploration of these technologies will lead to seismic industry level shifts. One component of fundraising is the area of foundation relations. Foundations are organizational entities with specific missions that use philanthropy to address issues. The preferences and tastes of each foundation differs. The gift capacity of each foundation also differs, and common practice defines it as the amount the foundation will provide in gifts and grants in a given year. The tax law from the 1960's requires foundations to give at least 5%. However, these amounts can include multiple philanthropic organizations. Can a single organization use data sets and technological tools to reverse engineer foundation giving success and determine the relevant criteria for determining gift capacity for its organization? This paper will focus on a case study of a large public university who proceeded to answer this question. The analytical approach builds on classical micro-economic theory that underlies the theoretical contribution of Nobel prize winner Gary Becker for his human capital theory. Just as everyone has specific tastes and preferences, similarly, foundations as a single unit have tastes and preferences that drive behaviors. While at a given point in time such preferences are fixed, they may change over time, particularly when new information becomes available. Those foundations, like individuals, behave rationally given these preferences, is a necessary given. And as Nobel prize winner Kenneth Arrow points out, information is key to success. This case study will also explore the process of how using predictive analysis can inform current strategy, highlight fundraising opportunities, and help organizational leadership sharpen their focus on spending investments and time on the fundraising entities that matter most.

2. Technological Change is Not Magic, and It Will Not Make Jobs Disappear: The Rent-Seeking Returns of Humanity as a Factor of Production

Steven Payson, University of Maryland

ChatGPT, autonomous vehicles, and other new developments have, understandably, created societal fears that most jobs will be replaced by robots or other applications of artificial intelligence. Unfortunately, economic thought in this area has largely joined the bandwagon of predicting doom for most workers, in the form of reinvigorated, Neo-Luddite doctrine. Admittedly, the prospect of AI effectively replacing human labor is very real. However, in this paper the argument will be made that human workers, ultimately, have nothing to fear from this. What will happen, over the next 50 years or so, is that many occupations will surely be replaced by automation, but unemployment will not rise as opportunities for other occupations will expand. This begs the question of what occupations may possibly expand, when robots become more able to do virtually anything better than any human being can do, at a much lower price?

The answer to this riddle, actually, lies in a tautology, which may first appear to be trivial, though it is not: The one thing that machines/robots cannot do, is to be human. This is relevant to labor economics, because there is often value added from human involvement in production—especially in the production of certain services. Consider, for example, the price differential between seeing a live theatrical performance, or a live concert, and seeing a videorecording of the same event (or even a higher-quality studio enriched version of it). Consider why human tour guides are still in demand, even though an audio device with a headset that can convey the same information, much more conveniently in many respects, to anyone receiving the same tour. Why are live lectures, or, for that matter, live presentations at economics conferences, valued more highly than their video recorded counterparts?

While all of these "economic rents" to "being human" may be associated, in certain respects, to human beings working as "performers before audiences" to some extent, and we are used to seeing such jobs as representing only a small fraction of the labor market, this will likely change as automation does something else for humanity besides replacing jobs—increasing incomes. For example, a robot may soon be able to arrive at someone's house to fix their plumbing, but the homeowner would likely prefer to pay a premium to have a human being arrive with that robot to discuss with the homeowner, "human-to-human," what the robot will be doing in their house. (And they will be able to afford that premium.) The new age of robotics will thus bring in a variety of new forms of employment in which human beings will earn income because of the added value they offer to the services that robots perform. Surely, different skill sets will evolve as different types of jobs replace others, as they always have throughout the history of human production. Nevertheless, the prospect of robots doing what human beings can do need not spell doom for human beings, because human beings will continue to earn economic rents simply from being human.

3. Comparative Analysis of Inflation Forecasting Using Machine Learning: Evidence from Selected G20 Countries

Brian William Sloboda, University of Maryland Global Campus (Presenter);
Rolando A. Santos, Lakeland Community College

With the recent trends in global inflation, much of the recent research focused on the future of inflation. This paper aims to analyze current trends in global inflation using data from selected G20 countries. The paper will use machine learning methodologies such as ARIMA, SARIMAX, XGBoost, Random Forest, and Facebook Prophet. Then, we compare the efficiencies of each forecasting methodology and any ethical issues. That is, we must prioritize ethical considerations during the development of these models, e.g., transparency, fairness, and accountability. To navigate the complexities of these methods effectively, a carefully designed multidisciplinary approach is necessary to ensure that these models are accurate representations of professional ethics. Using the best forecasting method based on sound ethical and professional analysis, we will try to get a glimpse of where the inflation would go in the short run for some of these selected countries. Our conclusion would be based on the consensus on the inflation rate forecast for these countries and highlighting these models that adhere to the ethical and professional considerations of sound economics.

Session #2. Expansions of Ideas beyond Conventional Economic Thought JEL Codes: B4, D73, Z11
Organizer: Steven Payson, University of Maryland, College Park
Chair: Debra Dwyer, Farmingdale State College June 27 @ 12:30 PM–2:15 PM

1. Scholarship Versus Truthfulness in Economics: How the Euphoria of Publication Recognition Has Obstructed Honesty in Economics
Steven Payson, University of Maryland, College Park

This paper addresses dishonesty in economics: the factors that enable it, and what can be done to stop them. It also discusses various instruments that economists can use to identify and dismantle dishonesty in the profession. These instruments include: (1) the study of how to change the incentives within the economics profession, (2) exposure of the organizations that promote dishonesty in economics, (3) appeals to economics students before they become indoctrinated (or before they self-select out of the economics profession), (4) government responsibility to ensure the elimination of government funding for dishonest economic research, (5) exposure of the authors of dishonest work in economics, and (6) a changes in the tone of discourse on the topic, with an emphasis on the need for scientific integrity. The paper argues, however, that scholarly discourse, itself, on the topic may do more harm than good, but drawing attention away from the factors that really matter when it comes to encouraging the profession to be more honest. The study draws upon previous literature on these topics, while also taking a fresh approach to examining some of the psychological and sociological factors that influence the profession's incentive system.

2. The Law and Economics of Arts
Julia Puaschunder, Julia Puaschunder, The New School

Arts is as old as humankind and a worldwide phenomenon. A scientific investigation of arts, however, is rather seldom. Arts production and consumption is perceived as less rational and tangible than classic goods and services. Neoclassical economics therefore hardly has any account or investigation of the arts. The opening of the neoclassical economics model for behavioral aspects in the behavioral economics revolution have now paved the way to start investigating the arts and surreal pricing mechanisms in the arts. Since the 2008/09 World Financial Recession led to a regulation trend of the U.S. housing sector, arts have become the new unregulated collateral in the U.S. economy. The advent of cryptocurrencies has also led to a new unregulated market to capitalize from arts tokens online. The COVID-19 pandemic has driven the trend of online arts production and consumption as an alternative to conventional arts consumption gateways. After the pandemic and with a limited and long-suppressed arts consumption, the demand for arts tickets has skyrocketed. Places like Monaco, which features the highest density of those who became rich with arts, have seen unprecedented economic growth of between 11-21% of GDP growth per the years of 2021 and 2022. Financial investors more and more tap into the arts world and artistic market capitalization, if one considers investors having turned to arts dealers like Jeffrey Koons. All these novel trends demand for a closer investigation of the law and economics of arts, which has not been covered in scientific investigations so far. First, the arts will be classified in different categories. Then, arts will be reflected upon the standard scheme of public and private goods and the unique long-term value creation through arts for society be stressed. Arts will be investigated from a behavioral economics standpoint and surreal pricing mechanisms in the arts uncovered with attention to ethics and corporate social responsibility. The newest trends in the online creation of arts will be captured and digital capitalization of arts be discussed. A cost-benefit analysis of the capitalization of arts as collateral with short-term, medium-term and long-term focus will be provided to inform politicians, policy makers and global governance executives.

Discussant: George DeMartino, University of Denver

Session #3. Political Economy of Economic Growth and Development JEL Codes: I14, O18 P18
Organizer: Steven Payson, University of Maryland, College Park
Chair: Steven Payson, University of Maryland, College Park June 27 @ 4:30 PM–6:15 PM

1. Housing Affordability and Its Impact on Income Inequality, Worldwide
Sadhabi Thapa, Institute for Applied Economics, Johns Hopkins University

This paper explores the connections between housing affordability, property ownership, and income inequality. Through a comprehensive analysis, this paper explains how the disparities in housing accessibility contributes to broader economic inequalities by examining the correlation between property ownership patterns and income distribution. By assessing the extent to which various levels of housing affordability intersect with the income inequality, studying the impact on different demographic groups and regions, this paper aims to produce a nuanced understanding of how disparities in housing opportunities can amplify broader economic inequalities.

Additionally, the research provides a set of targeted policies aimed to mitigate housing related disparities. The policy recommendations address challenges such as astronomical increases in property prices, limited affordable housing options, and unequal access to mortgage opportunities and proposes a more inclusive housing market. This study aims to highlight the important connection between affordable housing and income equality and provides sustainable solutions for housing opportunities that contribute to shared prosperity.

2. Peru's Success in Improving Child Nutrition Outcomes
Pranjali Maneriker, University of Maryland, College Park

Peru has had immense success in combating child malnutrition. Between 2007 and 2014, stunting in Peru halved for children under 5 years of age (measured using Height-for-Age Z scores). Since the 2000's, there has been a committed effort in Peru to improve child nutrition. Various public health policy programs were aimed at improving maternal and child health. Peru's performance has been exemplary in reducing child stunting. The malnourishment of children is a big challenge in developing nations. It causes high child-mortality rates and disease. It affects the future lives of millions of children. By exploring the channels through which one country was able to make huge strides to improve child nutrition, we can draw lessons for many other countries to benefit from. This study explores the factors that enabled Peru to have great success in improving child nutrition. It focuses on the effect of maternal socioeconomic conditions on child nutrition. By looking at Peru's health data over different points in time, the study investigates how the socioeconomic makeup of women changed over time as a result of targeted public health policy. It examines the relationships between a mother's nutrition, well-being, education, and employment and explores how these factors affect the health of her child.