

Navigating the Future: The Interplay of AI and International Economics

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Introduction

- ▶ Our research agenda is:
“Navigating the Future: The Interplay of AI and International Economics”



Introduction

- ▶ The panel “Navigating the Future: The Interplay of AI and International Economics” explores the transformative role of artificial intelligence (AI) in shaping international economic landscapes.
- ▶ Hosted by the International Trade and Finance Association, the session brings together leading scholars to examine how advanced AI methodologies, such as machine learning (ML) and natural language processing (NLP), are influencing economic forecasting, global supply chains, environmental challenges, and international organizations.

Introduction

Why does it matter?

Abstract

- ▶ Machine learning has revolutionized international trade and economics, creating opportunities for efficiency, precision, and strategic insight.
- ▶ ML enhances demand forecasting, allowing businesses to better anticipate market needs and optimize supply chains. ML models predict trade flows, identify emerging markets, and assess geopolitical risks, aiding firms in making informed decisions.

Abstract

- ▶ In international economics, ML facilitates the analysis of complex economic indicators, improving the accuracy of economic forecasts and enabling more responsive policy interventions.
- ▶ By processing vast datasets, ML models can identify trends and patterns that inform economic strategies, helping policymakers craft data-driven strategies for economic stability and growth.
- ▶ The integration of ML with economic modeling has refined economic forecasting.

Introduction

- ▶ Dalibor Stevanovic (UQAM and CIRANO) investigates the integration of machine learning into economic forecasting, highlighting the enhanced predictive capabilities and methodological innovations that surpass traditional econometric approaches.
- ▶ Nathalie De Marcellis (Polytechnique Montreal and CIRANO) addresses the critical role of AI in fostering resilience within global supply chains, focusing on adaptive strategies that mitigate disruptions in increasingly interconnected markets.

Introduction

- ▶ Ethan Hartley (Hawai University) explores the application of machine learning to environmental and economic challenges, emphasizing AI's potential in balancing sustainability and economic growth.
- ▶ Finally, Aleksandar Stojkov (Ss. Cyril and Methodius University) delves into the intersection of large language models (LLMs) and international organizations. He offers insights into how NLP-driven solutions are reshaping the operational dynamics and decision-making processes of global institutions.

Presentations and questions

For Dalibor : The Impact of Machine Learning on Economic Forecasting

1. How do machine learning techniques compare with traditional econometric models in terms of forecasting accuracy for international trade and finance?
2. What challenges do you see in interpreting machine learning models for policymakers, and how might these challenges be addressed?
3. Can machine learning improve the timeliness of economic forecasts in the context of rapid global events, such as financial crises or pandemics?

Presentations and questions

For Nathalie: Leveraging Machine Learning for Enhancing Global Supply Chain Resilience

1. How can machine learning be used to identify and mitigate vulnerabilities in global supply chains in real time?
2. What role does data quality and availability play in enhancing the effectiveness of machine learning for supply chain resilience?
3. Are there ethical or geopolitical concerns that arise when applying machine learning to supply chain optimization, especially in sensitive industries?

Presentations and questions

For Ethan: Machine Learning Approaches to Environmental and Economic Challenges

1. What role can machine learning play in integrating environmental sustainability into economic policy decisions?
2. How can machine learning address the data gaps that often hinder effective environmental and economic planning?
3. Are there specific examples where machine learning has successfully predicted or mitigated the impact of environmental disruptions on economies?

Presentations and questions

For Aleksandar: LLMs and International Organizations: An NLP Perspective

1. How can LLMs transform the way international organizations analyze global economic data and draft policy recommendations?
2. What are the limitations of current LLMs in understanding nuanced geopolitical contexts, and how can they be improved?
3. How do you foresee the integration of LLMs impacting transparency and accountability in international organizations?

Presentations

- ▶ Dalibor Stevanovic, UQAM Topic: The Impact of Machine Learning on Economic Forecasting [Presentation 1 here](#)
[Presentation 2 here](#)
- ▶ Nathalie De Marcellis, Polytechnique Montreal and CIRANO Topic: Leveraging Machine Learning for Enhancing Global Supply Chain Resilience [Presentation here](#)

Presentations

- ▶ Ethan Hartley, Hawai University Topic: Machine Learning Approaches to Environmental and Economic Challenges
Presentation here
- ▶ Aleksandar Stojkov, Ss. Cyril and Methodius University Topic: LLMs and International Organizations : An NLP Perspective
Presentation here

General Cross-Panel Questions

- ▶ How can machine learning be leveraged to better understand the complex interplay between environmental, economic, and geopolitical factors?
- ▶ What are the implications of AI-driven economic tools for global equity and inclusion, particularly for developing countries?
- ▶ How do we ensure that AI applications in international economics are used responsibly and transparently, avoiding unintended consequences like exacerbating inequalities or biases?
- ▶ What collaborative efforts between researchers, policymakers, and international organizations are needed to fully harness AI's potential in addressing global economic challenges?

Conclusion

Thank you!