

```
PS D:\agentic_ai_demo\personal_research_assistant> python scripts/load_pdf.py
```

Total chunks: 104

Sample chunk:

Current Environmental Problems and their

Solutions with the Help of New Technologies

Rayana Duchaeva², and Sherip Magomadov

Kadyrov Chechen State University , Sheripova Street, 32, 364024, Grozny, Russia

Abstract . The problem of ecology in these times is becoming more acute

every day. An environmental problem is a change in the natural

environment that leads to disruption of the functioning and structure of

nature. Global problems are generated by the contradictions of social

```
PS D:\agentic_ai_demo\personal_research_assistant> python
scripts/create_embeddings.py
```

Warning: You are sending unauthenticated requests to the HF Hub. Please set a
HF_TOKEN to enable higher rate limits and faster downloads.

Loading weights: 100% 103/103
[00:00<00:00, 3023.59it/s, Materializing param=pooler.dense.weight]

BertModel LOAD REPORT from: sentence-transformers/all-MiniLM-L6-v2

Key	Status	
-----	--------	--

-----+-----+--+		
-----------------	--	--

embeddings.position_ids	UNEXPECTED	
-------------------------	------------	--

Notes:

- UNEXPECTED :can be ignored when loading from different task/architecture; not ok if
you expect identical arch.

Embedding creation complete! Total chunks: 104

```
PS D:\agentic_ai_demo\personal_research_assistant> python scripts/rag_query.py
```

Answer:

Unfortunately, I am unable to access or retrieve content from external documents such as a specific page in Google Scholar. However, based on your provided context snippets that mention various articles and conference papers related to financial systems, economic security, environmental management, wine industry, labor market sustainability, digital economy transformation, globalization effects on the world financial system, strategies for national reviews, text mining approaches, regional raw material quality improvement in viticulture, forms of financial frauds, regression switching points and potential risks minimizations from 2016 to 2023. I can create a summary based on these topics as the main idea or central theme connecting them:

Title/Main Idea Abstract (hypothetical): "Strategic Adaptations in Financial Systems and Economic Policies for Sustainable Development Amidst Technological Transformation"

In recent years, there has been a growing focus on sustainable development within financial systems amid the rapid transformation of industrial complexes due to digitalization. This study investigates strategies employed in various sectors like environmental management and viticulture that aim for increased quality while ensuring economic security at regional levels (Podkolzina et al., 2021). In a parallel development, there has been the introduction of innovative approaches such as text mining-based comparative analyses to further refine these strategies in promoting national reviews and sustainable policies for environmental management. Additionally, emerging concerns regarding financial fraud have prompted research on effective ways to minimize risks (Podkolzina et al., 2018). The study also acknowledges the evolving labor market within a digital economy context that calls upon countries worldwide to adapt their industrial complexes for sustainable growth and development. In particular, attention has been drawn towards global financial system's role in fostering resilience amidst economic globalization (Podkolzina et al., 2019). Overall, this research highlights the significance of evolving strategies addressing these concerns to ensure sustainable and robust development within regional economies while navigating through technological transformations.

```
PS D:\agentic_ai_demo\personal_research_assistant> python scripts/agentic_ai.py
```

Step 1 Output:

The provided context seems to be a compilation of various research papers and articles that discuss different aspects of economic development and policy. Here are some key themes based on the titles given in the text snippet:

1. Evolutional Development vs. Revolutionary Leap (Institute of Scientific Communications Conference, 2021): This work likely compares gradual evolution with sudden revolutions or leaps as mechanisms for economic and social development. It probably explores whether societies benefit more from slow incremental improvements or transformative change to address challenges like regional security in the economy.
2. Innovative approaches in financial support for regional economic security (Izvestiya of The Institute of Economics, 2021): This publication might discuss new and creative methods being used by non-profit organizations or other actors to provide funding that helps maintain the stability of a region's economy amidst various threats.
3. Peculiarities of financial policy of non-profit organizations in an unstable macroeconomic environment (Espacios, 2017): The paper appears to examine how non-governmental and voluntary institutions manage their finances when faced with economic instability or uncertainty, likely including strategies for resilience.
4. End Game for Oil? –OPEC Prepares for an Age of Dwindling Demand (Reuters, 2021): This article from Reuters could discuss the challenges faced by oil-producing countries and organizations within the Organization of Petroleum Exporting Countries (OPEC) as global demand declines.
5. Possible presence of regression switching points in economic systems (Bioconference 63, 2018): The work probably investigates how certain thresholds or turning points exist within economies where a system may transition from growth to recession and other dynamics involved with these switches.
6. Sustainable development of the global labor market in digital economy transformation (Bioconference 2022): This publication might explore how evolving technologies, particularly those within the scope of a transforming industrial complex due to digitization or automation, are reshaping work and job markets worldwide.

7. Problems and perspectives of development of the world financial system in globalization conditions (Bioconference 2019): This paper likely discusses challenges faced by the international monetary landscape amid increasing interdependence due to global economic integration, potentially examining issues such as inequality or regulatory harmonization.

In summary, this text snippet appears to be a collection of research papers and articles from various conferences that cover topics like evolution versus revolution in development strategies, financial support for regional security within macroeconomic instability contexts, non-profit organization finances amidst economic uncertainty, declining oil demand affecting OPEC countries' economies, the identification of recessionary switch points and their impact on systems, labor market sustainability in digital economy transformations, as well as global financial system issues within a globalized context.

Step 2 Output:

The provided text snippet appears to be an aggregation of research findings from different conferences focusing primarily on economic development strategies across multiple sectors and regions. The key themes include the comparison between evolutionary growth versus revolutionary changes in societal advancement, innovative financial support mechanisms for regional security during times of macroeconomic instability especially within non-profit organizations' policies under such conditions (2017), challenges faced by OPEC countries due to declining global oil demand as the world moves toward a digital economy with automation reshaping labor markets and financial systems globally amidst ongoing globalization trends.

The works mentioned, like those from Espacios in 2017 or Reuters' piece in 2021 regarding OPEC countries grappling with reduced oil demand due to dwindling consumption patterns worldwide as the digital era advances - represent complex dynamics of modern-day economic ecosystems. The discussions seemingly touch on various facets, from financial policies and sustainable development in a digitizing labor market (2021) to identifying potential regression switch points within global economies suggesting transitions between growth phases or possible recessions as suggested by Bioconference 63's work in 2018.

Moreover, the research encapsulated spans across different years and conferences with contributions from various authors such as E. Tomilina (2017), I. M. Podkolzina &

Taranova(Ivanov) (2021, 2023a-c). It seems that these studies are interconnected in their analysis of financial systems' performance under globalization pressures and how they can adapt to changing demands within the macroeconomic landscape.

In essence, this compilation appears as a cross-sectional study on economic policy formulation against backdrops like oil demand decline (2021), regional security amidst agricultural financial instability assessments in Russia's Far East and Siberia during 2021 by Temirkanova et al., to the evolutionary development models versus revolution leaps for sustainable growth, as highlighted at a conference with Taranova & Podkolzina (Ivanov) leading such discussions.

Step 3 Output:

Investigate the specific strategies for incorporating renewable energy sources into agricultural practices while reducing water usage. Additionally, research advancements in pollution technologies that address hotspots and public concerns regarding environmental problems with water systems. Lastly, explore educational programs focused on asthma awareness related to emissions and community engagement strategies for promoting political behavior towards solar energy change.

PS D:\agentic_ai_demo\personal_research_assistant> python main.py

Welcome to Personal Research Assistant!

Enter your question: summarize the document

Step 1 Result:

The article discusses strategies for improving sustainability in winemaking through text mining-based comparative analysis of voluntary national reviews from various countries as presented in "Journal of Environmental Management" (2020). Another study, focused on the stavropol region by S. G. Shmatko and colleagues (2016), explores methods to enhance raw material quality for wine production.

Moreover, environmental issues are examined from a financial perspective in an article that discusses forms of fraud affecting global economic development as stated in "Modern Global Economic Development" journal issue 7(2) (2016). The latter piece underscores the impacts of uneven technological and socioeconomic progress across different countries on environmental problems.

The article emphasizes that solving these complex issues requires a comprehensive, multi-faceted approach involving individuals, communities, governments, as well as addressing social, economic, political aspects along with scientific endeavors for sustainable development and conservation of the planet's health for future generations.

Step 2 Result:

The article presents an analysis that compares voluntary national reviews related to environmental practices in winemaking using text mining techniques as reported by Shmatko et al. (2016). Additionally, it refers to research on the stavropol region aimed at improving wine's raw material quality and discusses financial fraud linked with global economic health as per Podkolzina et al.'s study in "Modern Global Economic Development" journal issue 7(2) (2016). The overarching theme is the necessity of holistic, multi-dimensional strategies that involve individual action and government policies to tackle environmental challenges effectively. These efforts should promote sustainable practices while considering social, economic, political factors for a better future.

Step 3 Result:

To gain a better understanding of the context provided, you might want to explore topics related to renewable energy sources such as solar power systems, wind plants with turbines, carries (which likely refers to carriages or transportation methods), future geothermal wildlife systems, and greenhouse gas emissions. Additionally, consider looking into sustainable agricultural practices that address water concerns and pollution from fertilizers and pesticides. Understanding the impact of renewable energy on local communities and how it contributes to reducing harmful asthma-causing emissions could also be valuable knowledge areas.