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AUTOMATING COUNTER-RACISM: A CONTROL THEORY APPROACH WITH SMOKY IN THE PLANETARYCHESS FRAMEWORK

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ABSTRACT

This research paper presents a theoretical framework for the development and deployment of 'Smoky,' an innovative artificial intelligence system designed to confront systemic racism. Grounded in African-centered scholarship, 'Smoky' represents a pioneering endeavor in leveraging technology for social equity. The paper explores the conceptualization, development, and potential applications of 'Smoky' within the decentralized autonomous organization (DAO) framework of Planetary Chess. Control theory and automation principles are integral to the design and operation of 'Smoky,' ensuring its effectiveness in addressing racial injustice. The paper highlights the role of control theory in system design, automation of monitoring and response, feedback mechanisms for learning and adaptation, integration with blockchain technology, decentralized control, and continuous evaluation and improvement. By integrating control theory and automation into the 'Smoky' system, the paper contributes to the advancement of technology-driven solutions for social justice. This paper serves as a call to philanthropists and potential collaborators to join in the realization of this vision, contributing to the advancement of technology-driven solutions for social justice.

KEYWORDS

Control Theory, Automation, Systemic Racism, Artificial Intelligence, Decentralized Autonomous Organization, Planetary Chess, Social Equity, Block chain Technology, Feedback Mechanisms, Continuous Evaluation

1. INTRODUCTION

Systemic racism persists as a pervasive issue in societies worldwide, permeating various aspects of life, including education, employment, criminal justice, and healthcare. Addressing systemic racism requires innovative approaches that leverage technology, data-driven insights, and collaborative efforts across communities. In this context, the development of 'Smoky,' an artificial intelligence system within the Planetary Chess [1] framework, presents a promising opportunity to confront systemic racism effectively. While the media and Hollywood explore the myriad of doomsday possibilities, we are already in the process of creating incredible machines able to learn and evaluate the significance of their discoveries, paving the way for a new epoch [2].

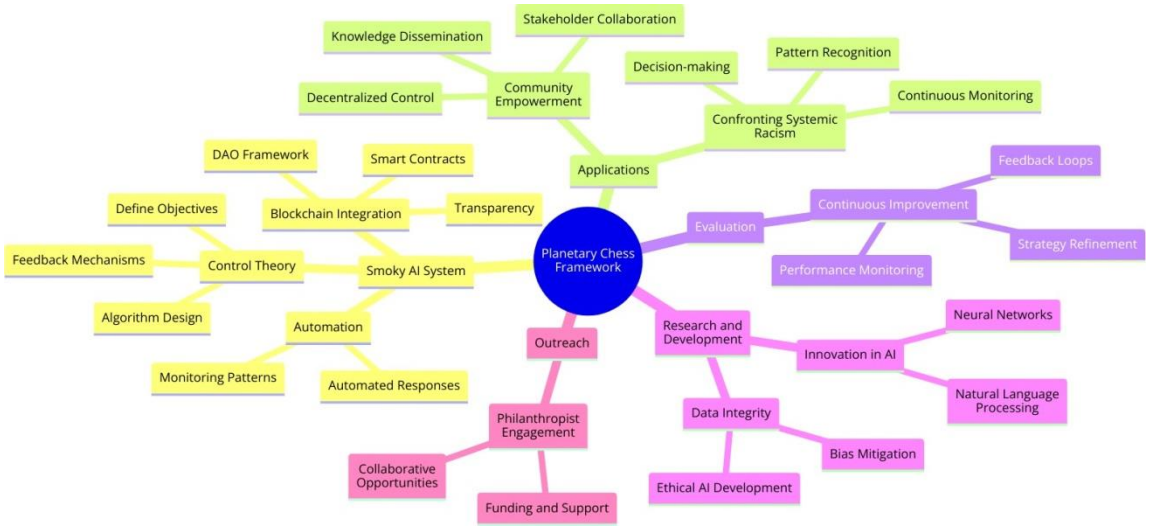

Figure 1. Planetary Chess Framework

1.1. Background: Smoky - An AI System for Addressing Systemic Racism Through Control Theory

Planetary Chess is a conceptual framework designed to address systemic racism as a strategic game [3]. This framework views the dismantling of racism as a series of moves and counter-moves within a complex social system. Smoky is an AI system under development specifically for Planetary Chess. It leverages control theory principles to analyze societal dynamics related to racism and inform strategic decision-making within the Planetary Chess framework. Smoky gathers and analyzes real-time data on white supremacy and racist activities using agent-based systems that monitor news sources. Smoky employs pattern recognition algorithms to identify trends and recurring patterns in racial injustice incidents, helping to illuminate the mechanisms of systemic racism. Smoky utilizes natural language processing techniques to understand and contextualize textual data related to racism, enabling deeper comprehension of the social and cultural dimensions of the issue. Smoky analyzes multimedia content (images, videos, etc.) to gain a holistic understanding of racial dynamics and identify underlying narratives. Smoky's core functionality relies on control theory principles to analyze and understand the complex system of systemic racism. By analyzing data and identifying patterns, Smoky aims to develop control mechanisms to counteract racist actions and promote social justice initiatives within the Planetary Chess framework [4].

1.2. Challenges and Considerations

Technical Expertise: Developing Smoky requires collaboration among experts from various fields to address the complexities of AI development and control theory applications.

Data Quality and Bias Mitigation: Careful data curation and bias mitigation techniques are crucial to ensure the fairness and effectiveness of Smoky's control mechanisms.

Ethical Considerations: The development of Smoky adheres to ethical guidelines for responsible AI development and control theory applications.

Continuous Monitoring and Evaluation: Regular assessments ensure that Smoky's control mechanisms remain effective and unbiased in addressing systemic racism within the Planetary Chess framework.

2. Literature Review: The Need for Smoky in Light of Algorithmic Bias

The pervasiveness of systemic racism extends beyond overt acts of discrimination and manifests in subtler forms within technological advancements. Ruha Benjamin's seminal work, "Race After Technology," sheds light on this critical issue. Benjamin argues that algorithms and AI systems often perpetuate and amplify racial inequalities due to inherent biases within their design and training data [5]. These biases can lead to discriminatory outcomes in areas like loan approvals, facial recognition software, and even large language models [5]. Building on Benjamin's analysis, Smoky emerges as a necessary intervention in the fight against algorithmic bias and its role in perpetuating systemic racism. Smoky's functionalities, particularly its focus on diverse data sources and pattern recognition in racial injustice incidents, directly address Benjamin's concerns. By incorporating African-centered scholarship and employing techniques to identify discriminatory patterns, Smoky strives to counteract the biases present in traditional AI systems [5]. Furthermore, Benjamin emphasizes the importance of "counter-racist" technology [5]. Smoky embodies this concept by utilizing control theory principles to actively challenge racist actions and promote social justice initiatives within the Planetary Chess framework. In essence, Smoky serves as a critical tool for dismantling the "New Jim Code" embedded within algorithms and fostering a more equitable technological landscape [5].

3. Control Theory in System Design

Control theory principles play a crucial role in the design of 'Smoky,' ensuring its efficacy in addressing systemic racism. By defining control objectives, specifying feedback mechanisms, and designing algorithms for decision-making and adaptation, control theory lays the foundation for the development of a robust and responsive system.

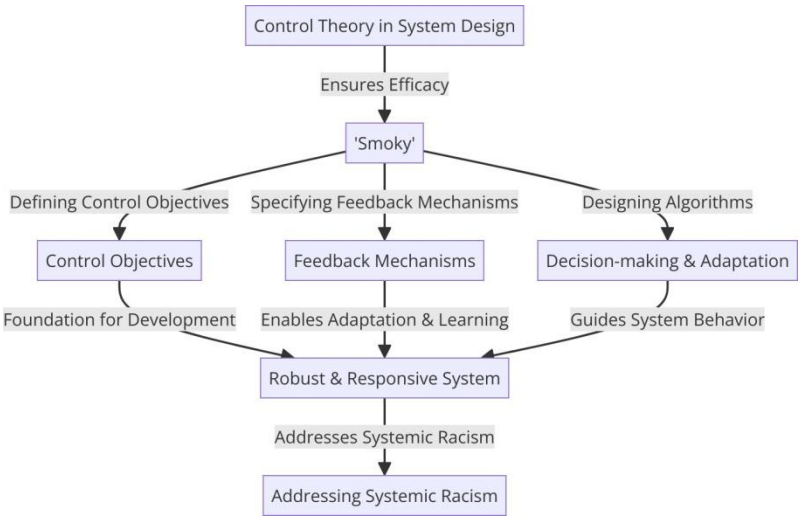

Figure 2. Control Theory in Smoky

3.1. Automation of Monitoring and Response

Automation is essential for 'Smoky' to continuously monitor patterns of systemic racism and respond effectively to emerging challenges. Automated algorithms analyze data on racial disparities, detect discriminatory practices, and trigger appropriate interventions, thereby contributing to the system's effectiveness in combating racism.

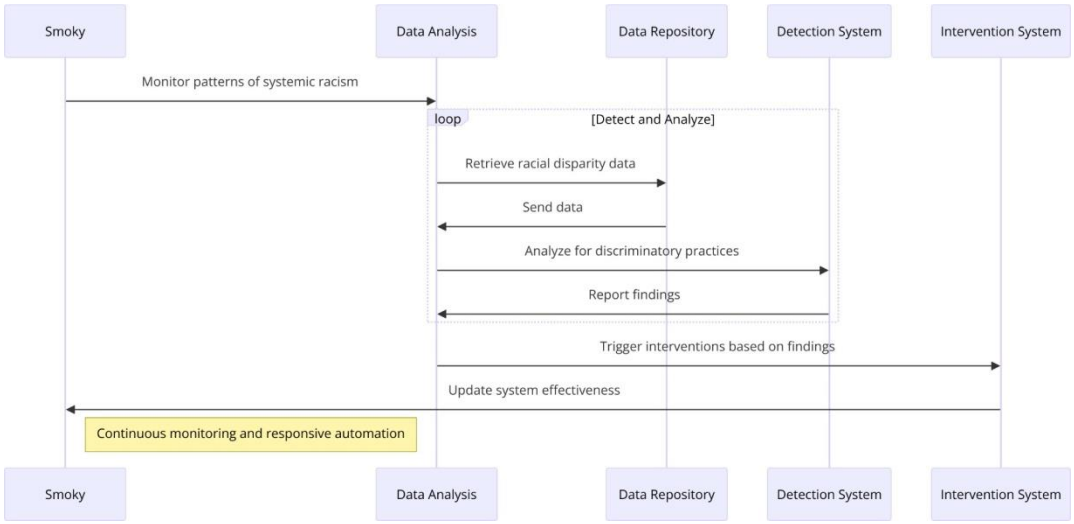

Figure 3. Automation

3.2. Feedback Mechanisms for Learning and Adaptation

Feedback mechanisms enable ‘Smoky’ to learn from past experiences and adapt to changing environments. Machine learning algorithms analyze feedback from users and historical data on racial inequalities, allowing the system to refine its strategies and improve its performance over time.

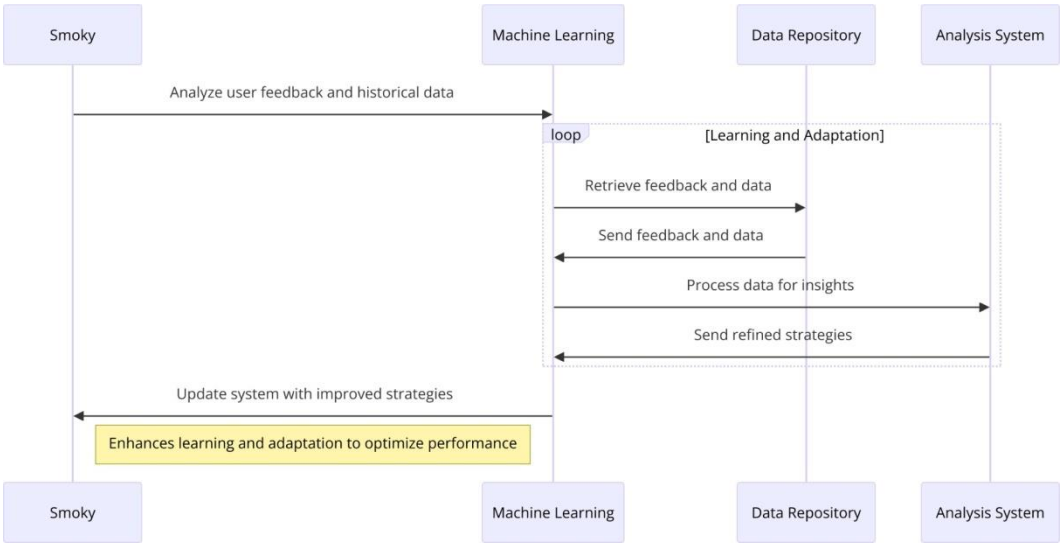

Figure 4. Feedback

3.3. Integration with Blockchain Technology

As part of the decentralized autonomous organization (DAO) framework of Planetary Chess, 'Smoky' leverages blockchain technology for transparency, accountability, and community governance. Smart contracts automate decision-making processes within the DAO, ensuring fairness and consensus among stakeholders.

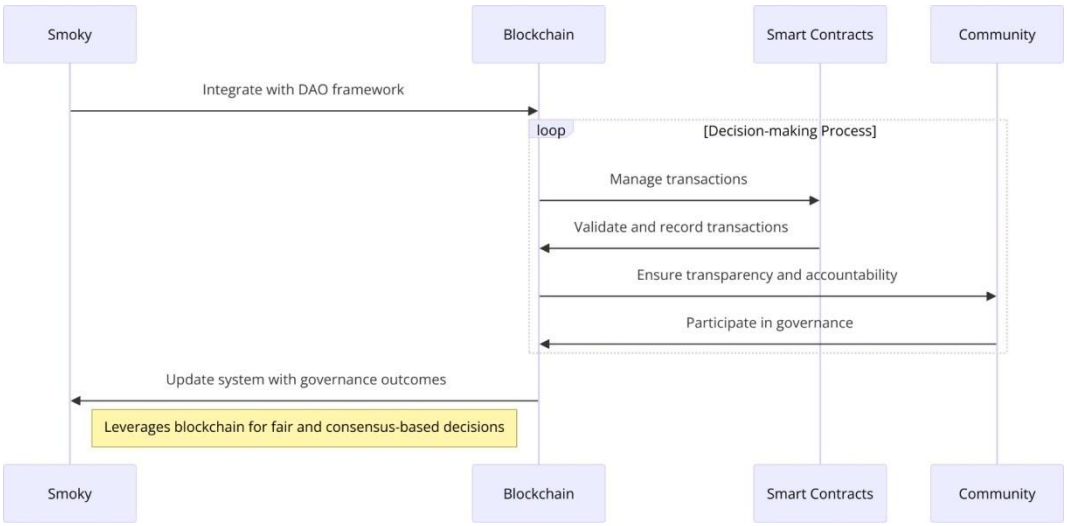

Figure 5. Utilizing Blockchain for Community

3.4. Decentralized Control and Collaboration

Control theory concepts such as distributed control and coordination enable decentralized control and collaboration among different components of 'Smoky' and within the Planetary Chess ecosystem. This decentralized approach facilitates agile responses to emerging challenges and fosters collaboration among diverse stakeholders.

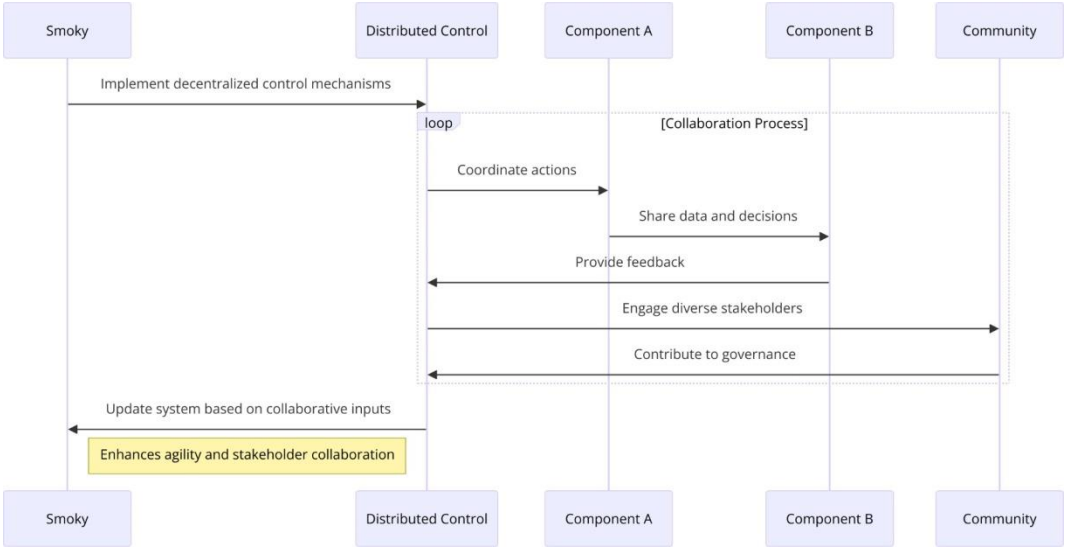

Figure 6. Decentralized Autonomous Organization (DAO)

3.5. Continuous Evaluation and Improvement

Continuous evaluation and improvement are essential aspects of 'Smoky's' operation. The system implements mechanisms for monitoring its performance, soliciting feedback from users, and iteratively refining its strategies based on real-world outcomes, thereby ensuring its ongoing effectiveness in confronting systemic racism.

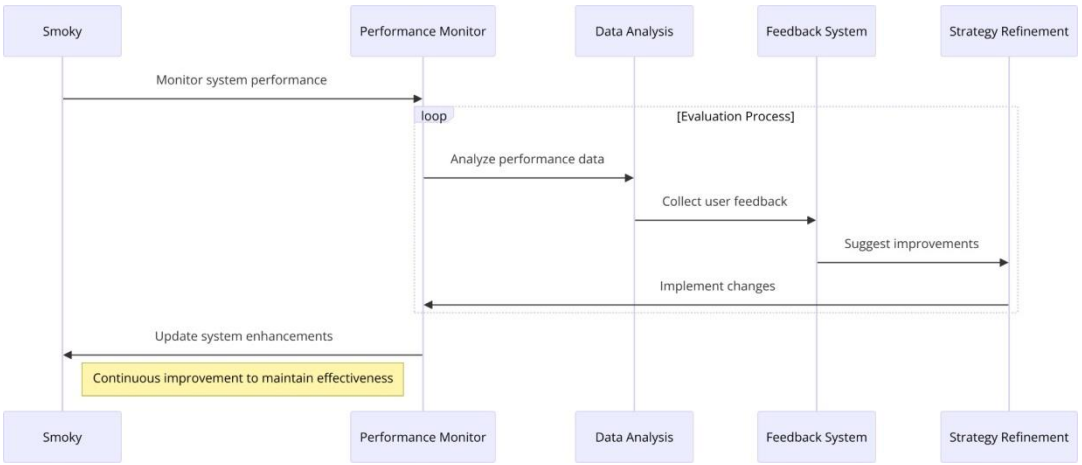

Figure 7. Continuous Improvement

4. CONCLUSION

The development and deployment of 'Smoky' within the Planetary Chess framework represent a significant step forward in leveraging technology for social equity. By integrating control theory and automation principles into the system's design and operation, 'Smoky' holds promise in effectively confronting systemic racism and advancing social justice goals. This research paper serves as a call to action for philanthropists and potential collaborators to support the realization of this vision, contributing to the advancement of technology-driven solutions for social justice.

4.1. Additional Figures

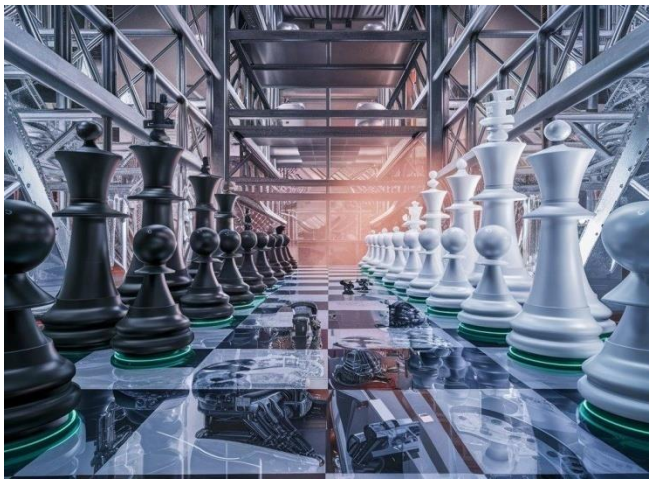

Figure 8. Tzu-Racializm Art

The Tzu-Racializm artwork symbolizes the innovative approach of utilizing NFT art, pioneered by the author, as a means to fund the Planetary Chess System aimed at dismantling systemic racism, thus connecting artistic expression with the scholarly endeavor to combat social injustice.

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