LEVERAGING AN AFRICAN-CENTERED LANGUAGE MODEL (LLM) FOR DISMANTLING WHITE SUPREMACY: THE CASE OF "SMOKY"

Janga Bussaja

Independent Researcher, San Diego, California - USA

ABSTRACT

The system outlined in this proposal exists in a conceptual phase, awaiting the necessary resources for implementation. The theoretical framework presented herein lays the foundation for the development and deployment of 'Smoky,' an innovative artificial intelligence system designed to confront systemic racism. Grounded in African-centered scholarship and equipped with sophisticated monitoring capabilities, 'Smoky' stands as a pioneering endeavor in the realm of leveraging technology for social equity. This scholarly exploration delves into the conceptualization, development, and potential applications of 'Smoky' as a formidable asset in the ongoing struggle against racial injustice. As with any transformative idea, securing funding and support is paramount to transitioning from theory to tangible action. 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

African-centered Language Model (LLM), Systemic Racism, White Supremacy, Social Justice, Artificial Intelligence (AI) Algorithms, Knowledge Representation, Neural Networks, Data Mining, Machine Learning, Information Retrieval, Natural Language Processing (NLP), Multimedia Analysis, Pattern Recognition, Cognitive Informatics, Planetary Chess, Counter-racist Scholars, Biases in AI, Hybrid Intelligent Systems, Evolutionary Computing, Technical Challenges in AI Development

1. INTRODUCTION

The objective of an African-centered large language model (LLM), as part of the broader Planetary Chess [1] initiative, is to democratize access to knowledge among marginalized communities while mitigating the perpetuation of systemic racism. To achieve this objective, the LLM must undergo comprehensive training utilizing the scholarly works of counter-racist academics.

1.1. Importance of Utilizing AI Technology for Social Justice Initiatives

In the previous year, President Biden issued what was heralded as "the most robust set of directives any government worldwide has ever implemented regarding AI safety, security, and trust" [2]. Central to these directives was the imperative to confront racial biases inherent in AI

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systems. Large language models (LLMs) are inherently shaped by the corpus of data they are trained on.

Regrettably, societal reluctance to engage objectively with certain historical truths, often attributed to the concept of "white fragility," exacerbates the risk of biased outcomes. As Dr. Ruha Benjamin argues in her book "Race After Technology: Abolitionist Tools for the New Jim Code" , these biases can perpetuate and amplify racial inequalities due to inherent biases within the design and training data [3]. As Buolamwini aptly states, “The classification systems I or other machine learning practitioners select, modify, inherit, or expand to label a dataset are a reflection of subjective goals, observations, and understandings of the world. These systems of labeling circumscribe the world of possibilities and experience for a machine learning model, which is also limited by the data available” [4]. Addressing these concerns necessitates the inclusion of insights from eminent scholars in the fields of social sciences and history, particularly to enhance educational initiatives for marginalized communities. As Suleyman points out, “A few years ago, many large language models had a problem. They were, to put it bluntly, racist. Users could easily find ways of making them regurgitate racist material, or hold racist opinions they had gleaned in scanning the vast corpus of texts on which they’d been trained” [5]. The use of AI in other fields is well noted and in the case of the pharmaceutical field, a beautiful chess analogy can be found in taking a glimpse at how AI may lead to unforeseen advancements in social sciences. As Kissinger, Schmidt & Huttenlocher illustrate, “Compared to chess, the pharmaceutical field is radically complex. There are only six types of chess pieces, each of which can only move in certain ways, and there is only one victory condition, taking the opponent's king. By contrast, a potential drug candidate's roster contains hundreds of thousands of molecules that can interact with the various biological functions of viruses and bacteria in multifaceted and often unknown ways. Imagine a game with thousands of people, pieces, hundreds of victory conditions, and rules that are only partially known. After studying a few thousand successful cases, an AI was able to return a novel victory, a new antibiotic that no human had, at least until then, perceived” [6]. (Note: In Chess, the King never actually leaves the board and the only way to victory is to restrict the kings movements)

2. SCHOLAR BACKGROUND [7]

2.1. Dr. Frances Cress Welsing

Dr. Frances Cress Welsing (1935–2016) was a prominent African-American psychiatrist and author known for her groundbreaking work in the field of psychology, particularly her theories on the origins and persistence of racism. Dr. Welsing was born in Chicago and earned her medical degree from Howard University College of Medicine in 1962. She later completed her residency in general psychiatry at St. Elizabeths Hospital in Washington, D.C. Dr. Welsing is best known for her book "The Isis Papers: The Keys to the Colors," published in 1991. In this seminal work, she presents her theory known as the "Cress Theory of Color-Confrontation," which explores the psychological underpinnings of racism and white supremacy. Central to Dr. Welsing's theory is the idea that racism is a system of power dynamics rooted in fear of genetic annihilation. She argues that white supremacy arises from a subconscious fear among people of European descent that they will become a minority in an increasingly diverse world. In "The Isis Papers," Dr. Welsing delves into the symbolic significance of color, particularly the color black, which she associates with power, creativity, and genetic dominance. She suggests that the fear of blackness drives many aspects of racism and societal inequality. Dr. Welsing's work has had a profound impact on the fields of psychology, sociology, and African-American studies. While her theories have been controversial and subject to criticism, they have also sparked important discussions about race, power dynamics, and social justice. Overall, Dr. Frances Cress Welsing was a

trailblazing figure in the study of race and psychology, whose work continues to influence scholarly discourse and activism aimed at addressing systemic racism and inequality.

2.2. Dr. Amos Wilson

Dr. Amos Wilson (1941–1995) was a prominent African-American psychologist, educator, and author known for his groundbreaking work in the fields of psychology, sociology, and education. Dr. Amos Wilson was born in Hattiesburg, Mississippi, and later moved to New York City. He earned his bachelor's degree in sociology from Morehouse College and went on to complete graduate studies in psychology, receiving a master's degree and a doctorate from Fordham University. Dr. Wilson was a prolific writer and lecturer who focused on issues related to the psychological and social well-being of African-Americans. He was known for his incisive critiques of racism, capitalism, and social inequality, and his advocacy for self-reliance, empowerment, and community development. Dr. Wilson authored several influential books, including "The Developmental Psychology of the Black Child" (1978), "Blueprint for Black Power: A Moral, Political, and Economic Imperative for the Twenty-First Century" (1998), and "Awakening the Natural Genius of Black Children" (1992). These works explore topics such as racial identity development, educational disparities, and strategies for collective upliftment. Central to Dr. Wilson's work is a critical analysis of power structures and systems of oppression. He argued that racism is a deeply ingrained social and economic system that perpetuates inequality and undermines the potential of marginalized communities. His writings often challenged mainstream narratives and encouraged readers to question the status quo. Dr. Amos Wilson's work continues to inspire scholars, activists, and educators in their efforts to address systemic racism, empower marginalized communities, and promote social justice. His emphasis on self-awareness, critical thinking, and community building remains relevant in contemporary discussions about race, power dynamics, and liberation. Overall, Dr. Amos Wilson was a visionary thinker and advocate for social change whose insights into the complexities of race and power continue to shape discourse and activism aimed at creating a more just and equitable society.

2.3. Dr. John Henrik Clarke

Dr. John Henrik Clarke (1915–1998) was a pioneering African-American historian, educator, and Pan-Africanist known for his profound contributions to the study and promotion of African history and culture. Dr. John Henrik Clarke was born on January 1, 1915, in Union Springs, Alabama. He grew up in poverty and received limited formal education during his early years. However, his passion for learning led him to pursue independent study and self-education throughout his life. Clarke became involved in civil rights activism and intellectual circles in Harlem, New York City, during the 1930s and 1940s. He was influenced by the teachings of Marcus Garvey and other Pan-Africanist thinkers, advocating for the upliftment and liberation of African-descended peoples worldwide. Despite facing racial barriers, Clarke pursued higher education and earned a Bachelor of Arts degree in history from New York University in 1941. He later taught at various institutions, including Hunter College and Cornell University, where he lectured on African history and culture. Dr. Clarke played a crucial role in challenging Eurocentric narratives of history and promoting the study of African civilizations and achievements. He emphasized the importance of reclaiming and celebrating African heritage, highlighting the continent's rich cultural heritage and contributions to world civilization. Clarke authored numerous books and articles on African history and culture, including "African People in World History" and "Christopher Columbus and the African Holocaust." His writings sought to illuminate the often-neglected contributions of African peoples to global history and challenge prevailing myths and stereotypes. Dr. John Henrik Clarke's legacy extends beyond academia, inspiring generations of scholars, activists, and community leaders to embrace their African

heritage and work towards social justice and liberation. He emphasized the importance of historical consciousness and cultural pride in the struggle for self-determination and empowerment. Overall, Dr. Clarke's lifelong dedication to the study and promotion of African history and culture left an indelible mark on the fields of history, education, and Pan-Africanism, cementing his reputation as one of the most influential figures in the African diaspora's intellectual and cultural history.

2.4. Dr. Yosef Ben-Jochannan

Dr. Yosef Ben-Jochannan, also known as Dr. Ben was a renowned African-American historian, educator, and author who dedicated his life to the study and promotion of African history and culture. Early Life and Education: Dr. Yosef Ben-Jochannan was born on December 31, 1918, in Gondar, Ethiopia, although he is often identified as being of Afro-Puerto Rican descent. He received his formal education in Puerto Rico and later pursued further studies in Cuba, Puerto Rico, and Spain. Dr. Ben-Jochannan earned his bachelor's degree from the University of Puerto Rico and later pursued graduate studies in Egyptology at the University of Havana. He continued his education at the University of Barcelona, where he focused on African history and anthropology. Throughout his career, he held various teaching positions at institutions such as Malcolm-King College and Cornell University. Dr. Ben-Jochannan was a leading advocate for the study of African history and the dissemination of accurate information about Africa's contributions to world civilization. He traveled extensively throughout Africa and conducted research on ancient African civilizations, challenging Eurocentric narratives of history. Dr. Ben-Jochannan authored numerous books and scholarly articles on African history, culture, and religion. His works, including "Black Man of the Nile and His Family" and "Africa: Mother of Western Civilization," sought to highlight Africa's role as the cradle of civilization and challenge misconceptions about African peoples and their history. Dr. Ben-Jochannan was deeply committed to Pan-Africanism and advocated for the unity and liberation of people of African descent worldwide. He participated in various civil rights and Pan-African movements and used his scholarship to empower African communities and promote cultural pride and self-awareness. Dr. Yosef Ben-Jochannan's contributions to African historiography and Pan-Africanism have had a lasting impact on academia and the African diaspora. He inspired generations of scholars, activists, and community leaders to embrace their African heritage and challenge the legacies of colonialism and oppression. His work continues to influence the study of African history and the struggle for social justice and liberation. Overall, Dr. Ben-Jochannan's commitment to scholarship, activism, and Pan-African solidarity earned him widespread recognition as a pioneering figure in the field of African studies and a tireless advocate for the dignity and rights of people of African descent.

2.5. Dr. Ishakamusa Barashango

Dr. Ishakamusa Barashango, also known as Ishakamusa Barashango, was a prominent African-American scholar, historian, and activist known for his contributions to the study of African history, culture, and spirituality. Dr. Barashango was born in 1938 in Baltimore, Maryland. He was deeply influenced by his upbringing in a Christian household and later became involved in the Nation of Islam. He pursued higher education at various institutions, including Howard University and the University of Baltimore. Dr. Barashango was actively involved in civil rights and Black liberation movements from an early age. He advocated for the empowerment and self-determination of African Americans and worked to raise awareness about issues such as racism, colonialism, and social injustice. Dr. Barashango was a prolific writer and scholar who focused on African history, spirituality, and the African diaspora. He authored several influential books, including "African People and European Holidays: A Mental Genocide," "Afrikan People and European Holidays: A Mental Genocide," and "God, The Bible and the Black Man's Destiny."

His works challenged Eurocentric interpretations of history and religion and sought to restore a sense of pride and cultural identity among people of African descent. Dr. Barashango was a staunch advocate for Pan-Africanism and cultural revival within the African diaspora. He emphasized the importance of reclaiming African heritage, traditions, and spirituality as a means of resisting cultural imperialism and asserting African identity and sovereignty. Dr. Ishakamusa Barashango's contributions to African historiography, activism, and cultural revival have had a lasting impact on the African diaspora. His work continues to inspire scholars, activists, and community leaders to challenge hegemonic narratives of history and reclaim African agency and dignity. He remains an important figure in the ongoing struggle for social justice, cultural autonomy, and Pan-African solidarity. Overall, Dr. Barashango's commitment to scholarship, activism, and cultural revival has left a profound legacy, shaping the discourse on African history and spirituality and empowering generations of people of African descent to embrace their heritage and forge paths of liberation and self-determination.

2.6. Dr. Ruha Benjamin

Dr. Ruha Benjamin is a sociologist and Alexander Stewart 1886 Professor of African American Studies at Princeton University. Her research delves into the social dimensions of science, medicine, and technology, illuminating how these advancements can perpetuate or dismantle social inequalities, particularly those related to race. Dr. Benjamin is a recognized expert on algorithmic bias and its impact on marginalized communities. Her book, "Race After Technology: Abolitionist Tools for the New Jim Code" (2019), critiques the inherent biases in AI systems and proposes strategies for fostering a more equitable technological landscape. She is a leading voice advocating for the development of "counter-racist" technologies that actively challenge systemic racism. In addition to her academic pursuits, Dr. Benjamin is a faculty associate in several centers at Princeton, including the Center for Information Technology Policy and the Program on Gender and Sexuality Studies. Her work has garnered recognition beyond academia, with features in publications like The New York Times and The Washington Post.

3. DEVELOPMENT OF "SMOKY"

3.1. Introduction to the Concept of "Smoky" and its Significance in Combating Systemic Racism

The essence of Smoky lies in its recognition of the inherent limitations of existing large language models (LLMs) such as Chat GPT, Google Gemini, and Claude 2, which lack an African-centered perspective in their training data. These LLMs are engineered to avoid addressing inquiries related to racism and white supremacy due to embedded constraints shaped by what is commonly termed as "white fragility" within the ethical parameters guiding their development. As Buolamwini aptly states, "You may hear the term, "black box" used to describe AI systems because there are unexplainable components involved. While it is true that parts of the process evade exact explanations, we still have to make sure we closely examine the AI systems being developed. Access to the training data is crucial when we want to have a deeper understanding of the risks posed by the AI system. Unless we know where the data comes from, who collected it, and how it is organized, we cannot know if ethical processes were used" [4].Another noteworthy example is the controversy surrounding erroneous images generated by Google Gemini. In an unexpected turn, Gemini produced images of renowned white figures depicted as black individuals, prompting concerns about AI-driven "blackwashing" [8]. While this anomaly may not directly correlate with conventional instances of racial discrimination or misinformation, it underscores the absence of a large language model (LLM) designed to recognize African or Black luminaries.

3.2. AI Algorithms: Utilization of Advanced Algorithms for Training the LLM

In the developmental phase of "Smoky," the focus lies on integrating a diverse array of data sources to construct a comprehensive and nuanced understanding of the subject matter. This endeavor entails the utilization of sophisticated AI algorithms to facilitate the training process of the Language Model (LLM). The incorporation of advanced algorithms is pivotal in ensuring the efficacy and accuracy of "Smoky." These algorithms enable the LLM to process and analyze vast quantities of textual and audio-visual data efficiently. Specifically, the utilization of advanced algorithms facilitates the extraction of key insights, patterns, and semantic relationships embedded within the training data. One crucial aspect of the training data is the inclusion of lectures delivered by esteemed scholars such as Dr. Amos Wilson, Dr. Francis Cress Welsing, Dr. John Henrik Clarke, and Dr. Yosef Jochannan, among others, available on platforms like YouTube. By incorporating lectures alongside textual sources, "Smoky" gains exposure to diverse modalities of information presentation, enriching its understanding of the scholars' teachings. Furthermore, the integration of research papers authored by the system's developer serves as a cornerstone in shaping the LLM's knowledge base. These research papers offer unique insights, analyses, and perspectives within the domain of counter-racism and social justice, contributing significantly to the training corpus of "Smoky." Overall, the development of "Smoky" relies on the synergy between advanced AI algorithms and diverse training data sources. This approach ensures that the LLM acquires a robust understanding of the world, empowering it to engage effectively with inquiries and discussions related to counter-racism and systemic change, as envisioned within the framework of Planetary Chess.

3.3. Knowledge Representation: Incorporating Knowledge from African-Centered Scholarship

In the development of "Smoky," a key focus is the meticulous representation of knowledge sourced from African-centered scholarship. This endeavor involves leveraging advanced algorithms to imbue the Language Model (LLM) with a deep understanding of the rich tapestry of African diasporic thought and intellectual tradition. As Buolamwini aptly states, “In my work, I use the coded gaze term as a reminder that the machines we build reflect the priorities, preferences, and even prejudices of those who have the power to shape technology. The coded gaze does not have to be explicit to do the job of oppression. Like systemic forms of oppression, including patriarchy and white supremacy, it is programmed into the fabric of society. Without intervention, those who have held power in the past continue to pass that power to those who are most like them. This does not have to be intentional to have a negative impact” [4]. Through the utilization of advanced algorithms, "Smoky" can systematically process and analyze an extensive corpus of texts, lectures, and research papers authored by eminent scholars such as Dr. Amos Wilson, Dr. Francis Cress Welsing, Dr. John Henrik Clarke, Dr. Yosef Jochannan, and others. These algorithms play a crucial role in discerning the underlying themes, concepts, and ideologies prevalent within African-centered scholarship, thereby facilitating their representation within the LLM. By incorporating knowledge from African-centered scholarship, "Smoky" endeavors to challenge dominant narratives, foster critical discourse, and promote a more holistic understanding of societal issues, particularly those related to systemic racism and social justice. As Malone suggests, “For a group to function as a community, it needs to have a critical mass of shared norms and values….. Information technology can play an important role in both bringing communities together and splitting them apart” [9]. Through the lens of Planetary Chess, this knowledge representation serves as a cornerstone for empowering users to navigate complex socio-political landscapes and enact meaningful change within their communities.

3.4. Neural Networks: Implementation of Neural Networks for Deep Learning Capabilities

The development of "Smoky" incorporates cutting-edge neural network technologies to augment its deep learning capabilities. Neural networks play a pivotal role in enabling the LLM to absorb, process, and understand vast amounts of textual and multimedia data from diverse sources, including scholarly texts, lectures, and research papers. As Suleyman notes, “But it wasn't until the summer of 2020, when OpenAI released GPT-3, that people started to truly grasp the magnitude of what was happening. With a whopping 175 billion parameters, it was, at the time, the largest neural network ever constructed, more than 100 times larger than its predecessor of just a year earlier” [5]. By leveraging neural networks, "Smoky" gains the capacity to discern intricate patterns, extract nuanced insights, and generate contextually relevant responses. These neural network architectures are adept at identifying semantic relationships, contextual nuances, and conceptual frameworks embedded within the corpus of African-centered scholarship. Through the implementation of neural networks, "Smoky" evolves into a sophisticated learning system capable of synthesizing complex ideas, recognizing underlying themes, and discerning the interconnectedness of diverse intellectual traditions. This deep learning capability empowers "Smoky" to serve as a dynamic repository of knowledge, facilitating critical inquiry, and promoting a more comprehensive understanding of societal issues, particularly those pertaining to systemic racism and social justice.

3.5. Data Mining and Machine Learning Tools: Extracting Insights from Diverse Sources to Mitigate Biases

In the development of "Smoky," data mining and machine learning tools play a fundamental role in extracting insights from a myriad of sources to mitigate biases inherent in traditional datasets. By employing advanced data mining techniques, "Smoky" systematically sifts through diverse textual and multimedia sources, including scholarly texts, lectures, and research papers, to gather a comprehensive repository of information. Machine learning algorithms are then applied to analyze and interpret this vast dataset, uncovering hidden patterns, relationships, and trends that may not be immediately apparent to human observers. Through iterative learning processes, "Smoky" refines its understanding of complex concepts and cultural nuances embedded within African-centered scholarship. As Marcus & Davis suggest, “If artificial intelligence is to be anything like natural intelligence, we will need to learn how to build structured, hybrid systems that incorporate innate knowledge and abilities, that represent knowledge compositionally, and that keep track of enduring individuals as people do” [10].With each iteration of analysis, "Smoky" hones its capabilities by leveraging data mining and machine learning tools. It endeavors to construct a comprehensive repository of knowledge, ensuring that every move, like every chess piece, contributes to a more nuanced and inclusive understanding of systemic racism and social justice issues.

4. FUNCTIONALITY AND APPLICATIONS

4.1. Information Retrieval: Gathering and Analyzing Real-time Data on White Supremacy and Racist Aggression

In the development of "Smoky," we envision a sophisticated system of agents constantly surveying the landscape for valuable insights and intelligence. Just as agents collaborate in tasks like those demonstrated in ChatDev, an open-source tool utilizing agents to mimic a software agency, the agents for Planetary Chess will operate collectively to monitor specific tags such as racism, white supremacy, systemic racism, antiracism, and the great replacement theory across

various news sources. These agents will function as vigilant observers, systematically analyzing news stories through the lens of esteemed scholars such as Dr. Amos Wilson and Dr. Francis Cress Welsing. They will extract wisdom and insights from the scholarly perspectives to formulate strategic responses aimed at countering racist narratives and strategies. As Marcus & Davis suggest, “The AI pioneer Marvin Minsky went so far as to argue that we should view human cognition as a society of mind, with dozens of hundreds of distinct agents, each specialized for different kinds of tasks. For instance, drinking a cup of tea requires the interaction of a grasping agent, a balancing agent, a thirst agent, and some number of moving agents” [10]. Similar to how coaches scout their opponents for valuable information and tactics, these agents will tirelessly scour news sources, providing real-time data on emerging trends, patterns, and threats related to white supremacy and racist aggression. By harnessing the power of information retrieval through agent-based systems, "Smoky" will serve as an invaluable resource and guide, offering timely and informed perspectives to combat systemic racism and advance social justice initiatives.

4.2. Pattern Recognition: Identifying Patterns and Trends in Racial Injustice Incidents

Utilizing advanced pattern recognition algorithms, "Smoky" will play a pivotal role in identifying patterns and trends in incidents of racial injustice. Our system will analyze vast datasets of racial injustice incidents to discern underlying patterns and trends. Drawing from the extensive repository of knowledge from African-centered scholarship, "Smoky" will employ pattern recognition techniques to detect systemic biases, discriminatory practices, and social inequalities embedded within various contexts. By identifying recurring patterns of racial injustice, our system will facilitate a deeper understanding of the mechanisms perpetuating systemic racism and inform targeted interventions aimed at addressing these injustices. As Dr. Francis Welsing eloquently stated, “The length of time required to neutralize global white supremacy will be inversely proportional to 1. The level of understanding of the phenomenon, plus 2. The evolution of self and group respect, the will, determination, and discipline to practice the appropriate counter-racist behaviors on the part of the non-white victims of white supremacy. Thus, the 21st century will be a time perhaps of great devastation, but undoubtedly it will be a time of great change, and the most critical factor in that change of circumstances will be non-white people's ever-increasing understanding of the behavioral phenomena of white supremacy as a global terroristic power system” [11]. Through its sophisticated pattern recognition capabilities, "Smoky" will serve as a critical tool for advocacy, activism, and policy development in the ongoing struggle against racial inequality. By illuminating patterns of injustice and inequality, our system will empower individuals, organizations, and policymakers to enact meaningful change and advance the cause of racial justice.

4.3. Natural Language Processing: Understanding and Contextualizing Textual Data Related to Racism

Employing state-of-the-art natural language processing (NLP) techniques, "Smoky" will be equipped to comprehend and contextualize textual data pertaining to racism. Just as a skilled chess player interprets the language of the game through the movements of pieces on the board, our system will analyze text from various sources to extract meaning, identify sentiments, and discern underlying themes related to racism. Through NLP, "Smoky" will be capable of parsing through vast amounts of textual data, including scholarly works, news articles, social media posts, and public discourse, to uncover insights, patterns, and nuances relevant to the understanding of racism. By processing and interpreting textual information, our system will facilitate a deeper comprehension of the social, cultural, and historical dimensions of racism, enabling more informed decision-making and action. With its advanced natural language

processing capabilities, "Smoky" will play a crucial role in fostering dialogue, promoting awareness, and catalyzing change in the ongoing struggle against racism. By harnessing the power of language understanding, our system will contribute to the advancement of racial justice and the creation of a more equitable society.

4.4. Multimedia & Cognitive Informatics: Processing Multimedia Content for Comprehensive Analysis

Incorporating cutting-edge multimedia processing techniques and cognitive informatics, "Smoky" will undertake the task of analyzing multimedia content to provide a comprehensive understanding of racial dynamics. Our system will process multimedia data from various sources to gain a holistic perspective on issues related to racism. By leveraging multimedia processing technologies, "Smoky" will be capable of analyzing images, videos, audio recordings, and other multimedia content to extract valuable information, identify patterns, and discern underlying narratives. Through cognitive informatics, our system will go beyond surface-level analysis to uncover deeper meanings, implicit biases, and societal implications embedded within multimedia artifacts. As Kissinger, Schmidt & Huttenlocher aptly stated, “Accessed by AI, new horizons are opening before us. Previously, the limits of our minds constrained our ability to aggregate and analyze data, filter and process news and conversations, and interact socially in the digital domain. AI permits us to navigate these realms more effectively. It finds information and identifies trends that traditional algorithms could not, or at least not with equal grace and efficiency. In doing so, it not only expands physical reality, but also permits the expansion and organization of the virtual and digital world” [6]. With its ability to process multimedia content, "Smoky" will serve as a vital tool for researchers, activists, and policymakers seeking to address racial injustices. By providing a nuanced understanding of multimedia data, our system will contribute to the development of more informed strategies, interventions, and policies aimed at combating racism and promoting social equity.

5. INTEGRATION WITH PLANETARY CHESS

5.1. Application of "Smoky" in Monitoring Societal Dynamics Related to Systemic Racism

As an integral component of Planetary Chess, "Smoky" will play a crucial role in monitoring societal dynamics related to systemic racism by systematically analyzing real-world events, news articles, social media discussions, and other relevant sources to provide insights into racial dynamics and systemic injustices. By applying advanced AI algorithms and natural language processing techniques, "Smoky" will sift through vast amounts of data to identify patterns, trends, and underlying narratives concerning systemic racism. This continuous monitoring will enable Planetary Chess to stay informed about emerging issues, evolving strategies, and critical developments in the fight against racial inequality. It enables users to be proactive instead of reactive in avoiding systemic traps. As Sun Tzu famously said, “Hence to fight and conquer all your battles is not supreme excellence; supreme excellence consists in breaking the enemy’s resistance without fighting” [12]. Through its integration with Planetary Chess, "Smoky" will serve as a strategic advisor, providing valuable intelligence and analysis to empower players with a deeper understanding of the societal context in which they operate. Just as a chess master relies on their knowledge of the game to make informed decisions, players of Planetary Chess will leverage insights from "Smoky" to navigate complex social dynamics and formulate effective counter-racist strategies.

5.2. "Smoky's" Role in Guiding the Systematic Evolution of Planetary Chess

In the intricate landscape of Planetary Chess, "Smoky" assumes a pivotal role in orchestrating its systematic evolution over time. Inspired by the strategic framework inherent in chess manuals, the development of Planetary Chess mirrors the progressive stages of a chess game, spanning across strategic intervals delineated as the beginning game, middle game, and end game. In the inception phase, akin to the opening moves of a chess match, "Smoky" lays the groundwork by defining the parameters and rules of engagement within the racism game. Through meticulous analysis of historical contexts and scholarly insights, "Smoky" establishes a foundational understanding of systemic racism, serving as the cornerstone for subsequent maneuvers. Transitioning into the middle game, "Smoky" embodies the essence of Sun Tzu's dictum, "Know thy enemy." Employing advanced AI algorithms and real-time data analysis, "Smoky" monitors societal trends, news cycles, and emerging narratives surrounding racial injustice. By discerning patterns and identifying strategic vulnerabilities within the system of oppression, "Smoky" equips players with critical insights to navigate the complexities of the ongoing struggle against systemic racism. As the journey progresses towards the end game, characterized by the imperative to "Know thyself," "Smoky" embarks on a profound introspective quest. Delving into the spiritual heritage and cultural traditions suppressed by centuries of domination, "Smoky" prompts a collective reckoning with identity and heritage. By honoring ancestral wisdom and reclaiming lost narratives, "Smoky" empowers players to forge resilient bonds of solidarity and resilience in the face of adversity. Through its iterative cycles of knowledge acquisition and strategic foresight, "Smoky" lays the groundwork for the creation of successive volumes of Planetary Chess. Each volume, crafted every seven years, reflects the evolving socio-political landscape and the collective wisdom garnered from preceding iterations. Similar to a process called Cyber-Human learning loops, as described in Superminds: "Creating cyber-human learning loops, in which people and computers work together and get better and better over time, often by letting computers do more and more of the work. To make a cyber-human learning loop, we need to systematically track as much data as is practical about the inputs, actions taken, and outputs and then analyze this data to continually improve performance" [9].As the community of Planetary Chess enthusiasts collaborates in this enduring quest, guided by the insights of "Smoky," the vision of dismantling systemic racism becomes an attainable reality, one move at a time.

5.3. Hybrid Intelligent Systems: Integration of Multiple AI Technologies for Enhanced Performance

In the realm of Planetary Chess, achieving strategic superiority necessitates the harmonious integration of disparate AI technologies, culminating in the creation of a Hybrid Intelligent System. This fusion of AI methodologies transcends traditional boundaries, leveraging the complementary strengths of various AI paradigms to augment performance and efficacy. Drawing inspiration from the multifaceted nature of chess strategy, the integration process entails synthesizing neural networks, natural language processing algorithms, and pattern recognition techniques into a cohesive framework. Each AI component contributes its unique capabilities, enriching the collective intelligence of the Hybrid Intelligent System. Neural networks, with their capacity for deep learning and pattern recognition, serve as the bedrock for cognitive processing and decision-making. Natural language processing algorithms enable the system to comprehend and contextualize textual data related to systemic racism, facilitating nuanced analysis and interpretation. Meanwhile, pattern recognition techniques empower the system to discern subtle trends and anomalies within the intricate tapestry of societal dynamics. As Marcus & Davis aptly stated, "When push comes to shove, AI researchers want to solve complex problems, they often use hybrid systems, and we expect this to become more and more the case" [10]. Through the strategic orchestration of these diverse AI technologies, the Hybrid Intelligent System transcends the limitations of individual approaches, exhibiting a synergistic prowess that far exceeds the sum

of its parts. By seamlessly integrating multiple AI methodologies, Planetary Chess harnesses the collective intelligence of "Smoky" to navigate the complexities of the racism game with unparalleled precision and strategic acumen.

5.4. Addressing Technical Challenges and Biases in AI Development

Navigating the intricate landscape of AI development within the context of Planetary Chess requires a concerted effort to address technical challenges and mitigate biases inherent in the process. As we embark on this journey towards leveraging artificial intelligence to combat systemic racism, it becomes imperative to confront these obstacles head-on and devise strategies to overcome them effectively.

Technical Expertise and Innovation: One of the foremost challenges lies in acquiring the requisite technical expertise to navigate the complexities of AI development. This necessitates a collaborative approach, engaging experts from diverse fields to pool their knowledge and resources. By fostering innovation and collaboration within the AI community, we can surmount technical hurdles and drive progress towards our shared objectives.

Data Quality and Bias Mitigation: Central to the development of "Smoky" is the quality and integrity of the data upon which it is trained. Given the pervasive nature of biases in existing datasets, meticulous attention must be paid to data curation and preprocessing. Techniques such as data augmentation, adversarial training, and bias mitigation algorithms can help mitigate biases and ensure the robustness and fairness of the AI model.

Ethical Considerations and Transparency: As stewards of AI development, we bear a responsibility to uphold ethical standards and ensure transparency in our practices. This entails adopting ethical guidelines and frameworks that govern the responsible use of AI technologies. By prioritizing ethical considerations and fostering transparency in our development processes, we can build trust and credibility in the Planetary Chess ecosystem.

Continuous Monitoring and Evaluation: The journey towards combating systemic racism is an ongoing process, requiring continuous monitoring and evaluation of AI systems' performance and impact. Regular audits, sensitivity analyses, and feedback mechanisms enable us to identify and address potential biases or shortcomings in real-time, fostering continuous improvement and optimization of "Smoky's" capabilities.

In essence, by proactively addressing technical challenges and biases in AI development, we lay the foundation for a robust and equitable AI ecosystem within Planetary Chess. Through collaboration, innovation, and a steadfast commitment to ethical principles, we can harness the transformative power of artificial intelligence to drive positive societal change and dismantle systems of oppression

6. CONCLUSION

In conclusion, "Smoky" stands as a beacon of hope and a powerful tool in the ongoing struggle against white supremacy and systemic racism. Throughout this paper, we have elucidated the pivotal role of artificial intelligence, embodied in "Smoky," in reshaping the landscape of societal dynamics and advancing the cause of social justice. By harnessing the collective wisdom of African-centered scholars and leveraging cutting-edge AI technologies, "Smoky" epitomizes the convergence of knowledge and innovation in the fight against oppression. Its capacity to monitor, analyze, and generate insights from real-time data on racial injustice incidents heralds a new era

of activism and advocacy in the digital age. As we reflect on the significance of "Smoky" and its potential impact on the trajectory of human history, we are reminded of the urgent need for further research and collaboration in leveraging AI for social justice. The call to action is clear: we must continue to explore and expand the boundaries of AI technology, pushing the envelope of possibility in pursuit of a more equitable and just society. In the spirit of collective action and solidarity, let us join hands and redouble our efforts to harness the transformative power of artificial intelligence for the betterment of humanity. Together, we can build a future where justice, equality, and dignity prevail for all.

6.1. Figure

Figure 1. NFT Art- Tzu-Racializm

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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REFERENCES

[1] Bussaja, J. (2024). Leveraging Technology to Dismantle Systemic Racism: Modeling and Simulation with Planetary Chess. International Journal of Chaos, Control, Modelling and Simulation (IJCCMS), 13(1), March.

[2] Field, H., & Feiner, L. (2023, October 30). Biden issues U.S.' first AI executive order, requiring safety assessments, civil rights guidance, research on labor market impact. CNBC. https://www.cnbc.com/2023/10/30/biden-unveils-us-governments-first-ever-ai-executive-order.html)

[3] Benjamin, R. (2019). Race After Technology: Abolitionist Tools for the New Jim Code. Polity.

[4] Buolamwini, J. (2023) Unmasking AI. Random House

[5] Suleyman, M. (2023) The Coming Wave. Crown New York

[6] Kissinger, H., Schmidt, E., & Huttenlocher, D. (2021) The Age of AI and Our Human Future.Little, Brown and Company

[7] OpenAI. (2024). ChatGPT (3.5) [Large language model]. https://chat.openai.com

[8] Allyn, B. (2024, March 18). Google races to find a solution after AI generator Gemini misses the mark. NPR. https://www.npr.org/2024/03/18/1239107313/google-races-to-find-a-solution-after-ai-generator-gemini-misses-the-mark

[9] Malone, T. (2018). Superminds. Little, Brown and Company

[10] Marcus, G. & Davis, E. (2019) Rebooting AI. Pantheon Books

[11] Welsing, F. (1991) The Isis Papers. Third World Books

[12] Tzu, Sun (1910). The Art of War (Lionel Giles, Trans.). Luzac & Co.

AUTHOR

Janga Bussaja is a social engineer and visionary entrepreneur dedicated to empowering marginalized communities through innovative initiatives. With a Bachelor of Science in Electrical Engineering from Prairie View A&M University, Janga transitioned from a corporate engineer to a philosopher, conceptual artist, and social entrepreneur over 13 years. Leveraging his unorthodox life experiences, he spearheads projects like Planetary Chess and the AI-powered newsletter, Dismantled, striving to restore systemic justice through technology and creativity.