

# Safeguarding Digital Rights in U.S. Border Security: An Exploration of AI Technology Integration

## **Abstract**

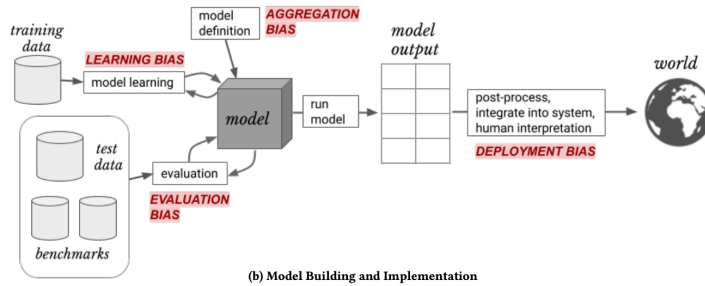
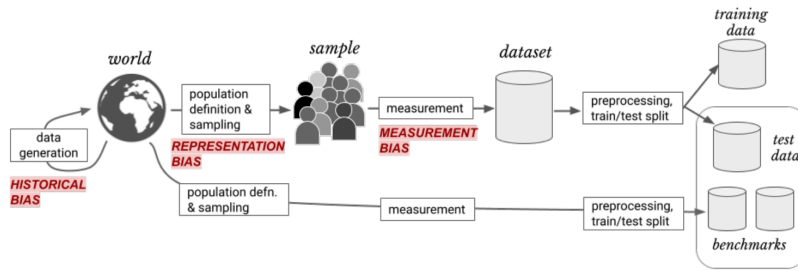
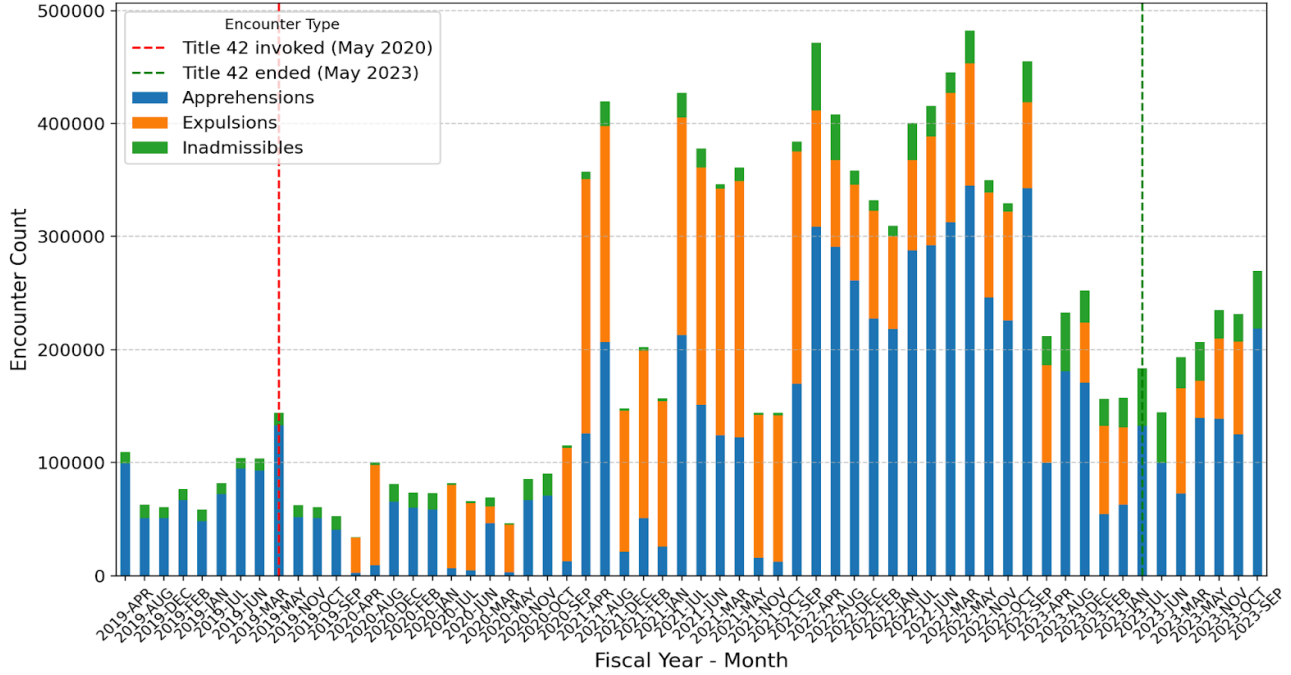
As our world becomes increasingly interconnected, navigating the delicate balance between technological innovation and the protection of fundamental rights has never been more pressing. The challenges involved in striking this balance have slowly moved to the forefront of discussions surrounding the adoption and impact of these advancements, particularly within the realms of artificial intelligence (AI) and machine learning. In an era defined by rapid technological progress and heightened concerns about border security, the convergence of AI and the US-Mexico Border has emerged as a critical focal point, elevating discussions not only on surveillance capabilities but also on the protection of digital and human rights. Amidst the complexities of immigration, the deployment of AI along the border has become both a proposed solution and a subject of heated debate. This work delves into the utilization of these technologies at the border while underscoring the imperative of protecting digital rights within the framework of AI-driven border control.

Through an exploration of various technologies such as satellite imagery, internet search analysis, and cell phone tower tracking, coupled with an examination of their implementation in the Customs and Border Protection (CBP) agency, this project seeks to provide a comprehensive overview of the current landscape and future implications of AI in border security. Moreover, it addresses the ethical considerations and potential consequences of relying on AI-driven solutions, advocating for a holistic approach that prioritizes both security and the protection of civil liberties. By engaging with key stakeholders and analyzing data collection methods, this research contributes to the ongoing discourse on the role of technology in migration management, ultimately advocating for a vision of border control that is not only effective but also ethically sound.

More specifically, this paper starts by exploring the multifaceted implications of AI deployment within the framework of immigration, with a specific focus on the U.S.-Mexico border. It examines President Joe Biden's landmark Executive Order on AI and its implications for immigration policies, highlighting the directive's emphasis on technological modernization and its potential impacts on various stakeholders, particularly immigrant communities. Additionally, the paper scrutinizes the evolution of migration dynamics along the Southwest border, contextualizing the surge in border encounters and the challenges posed by mass migration events. Through a comprehensive overview of immigration policies, enforcement measures, and the shifting demographic trends of migrants, the paper elucidates the intricate interplay of socio-political factors influencing border governance. Furthermore, it delves into the rise of AI technologies and their integration into border surveillance systems, analyzing the ethical and human rights implications of automated decision-making processes. Moreover, the paper expands its analysis to explore innovative approaches to migration prediction, utilizing advanced technologies such as satellite imagery, internet search analysis, and cell phone tower tracking. Drawing on use cases from the European Union and data collection practices within the U.S. Customs and Border Protection (CBP), the project investigates the vision of a consistently predictable border through AI integration at various stages of the migration process. This includes examining AI systems' roles in anticipating movement, monitoring migration trajectories, and managing arrivals, highlighting the potential benefits and challenges associated with predictive border management.

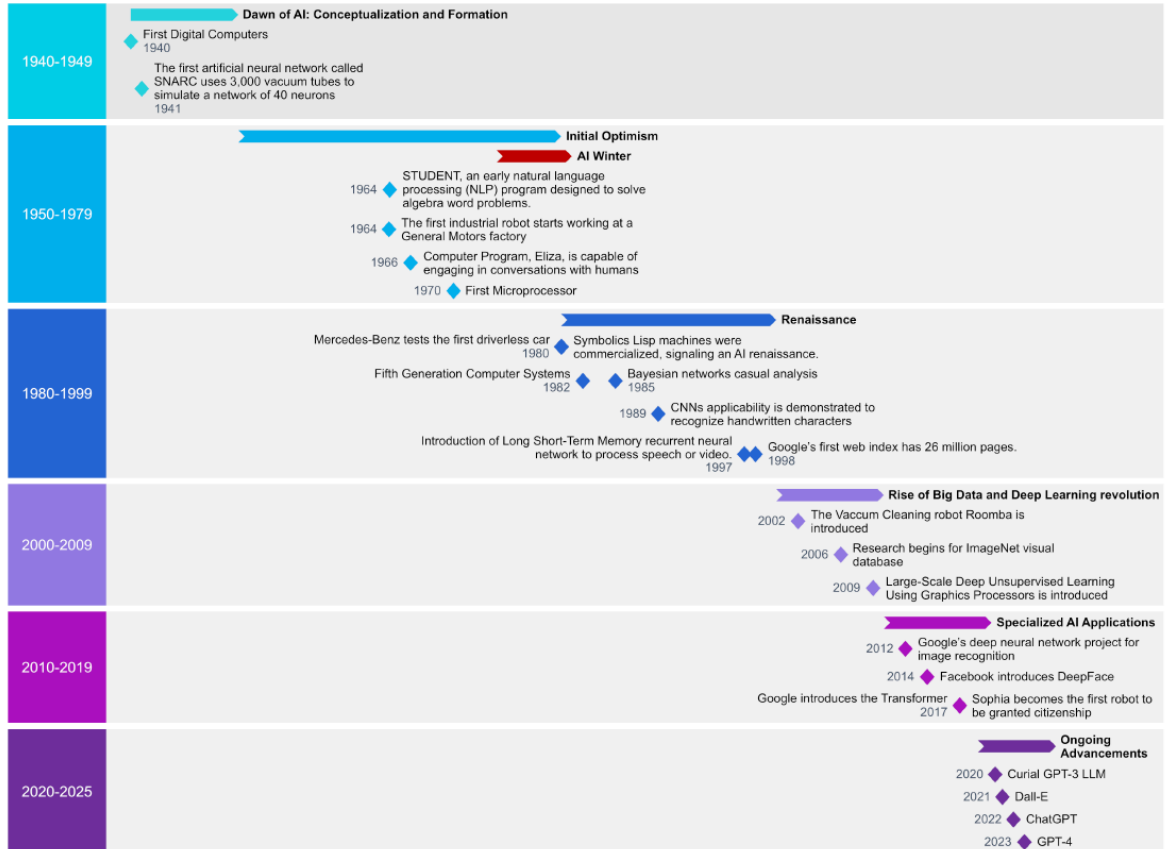
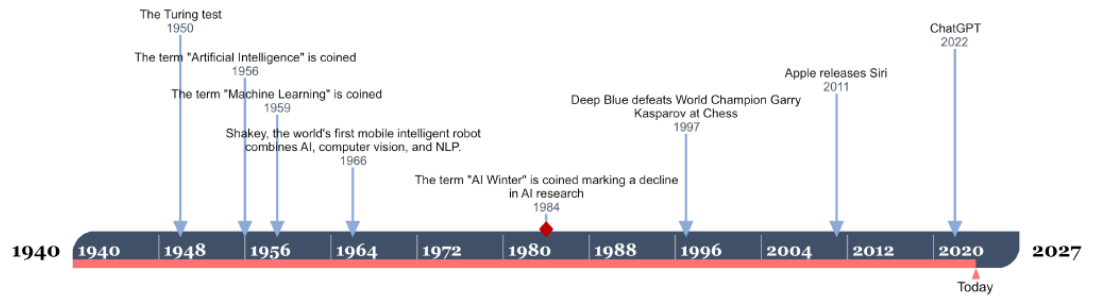
By critically examining the risks and challenges associated with AI deployment, the paper advocates for a nuanced approach to immigration governance that prioritizes the rights and well-being of vulnerable communities. Ultimately, it underscores the imperative for proactive governance frameworks that address the complex intersections of technology, migration, and societal dynamics, emphasizing the need for comprehensive strategies beyond mere technological solutions.

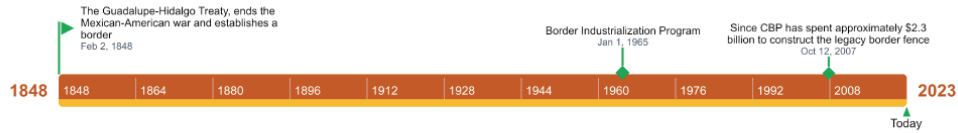
Encounter Type by Fiscal Year and Month



You can view the project here:

<https://docs.google.com/document/d/1xkzUPdBJYuMBc862ZHybiowpHIkWxoB5mWAMasa0f4U/edit>





1848-1855	<p><b>Post-Guadalupe Hidalgo Treaty Era</b></p> <p>1848 - 1855</p> <ul style="list-style-type: none"> <li>1852 Chamizal Dispute over Rio Grande between El Paso, Texas, and Ciudad Juárez, Chihuahua</li> <li>1855 The Mexican-United States Boundary Commission finishes border negotiations and defines monuments separating US/Mexico</li> </ul>
1882-1930s	<p><b>Early Immigration Restrictions and Border Enforcement</b></p> <p>1882 - 1939</p> <ul style="list-style-type: none"> <li>1882 The Chinese Exclusion Act</li> <li>1911 The first ever border fence was completed</li> <li>1924 The Border Patrol was created and with it, enforcement of the regulations along the border became stricter.</li> <li>1930 - 1939 Over 1 million people were "repatriated" to Mexico during this period.</li> </ul>
1942-1954	<p><b>Bracero Program and Illegal Immigration</b></p> <p>1942 - 1954</p> <ul style="list-style-type: none"> <li>1942 The Bracero Program is initiated to bring in a Mexican Labor Force</li> <li>1945 WWII Ends and illegal immigration increases</li> <li>1954 Operation Wetback addresses rise in illegal migration</li> <li>1964 The Bracero Program ends because of illegal migration</li> </ul>
1955-1986	<p><b>Rise in Unauthorized Immigration</b></p> <p>1955 - 1986</p> <ul style="list-style-type: none"> <li>Congress passed the Immigration and Nationality Act</li> <li>1982 Peso devaluation in 1982 ignites economic crisis in Mexico</li> </ul>
1990-2005	<p><b>Border Enforcement</b></p> <p>1990 - 2005</p> <ul style="list-style-type: none"> <li>1994 North American Free Trade Agreement Established</li> <li>2003 ICE established</li> </ul>
2006-2015	<p><b>Secure Fence and Heightened Security</b></p> <p>2006 - 2015</p> <ul style="list-style-type: none"> <li>2006 The Secure Fence Act is passed</li> <li>2011 649 miles of physical barriers are completed</li> </ul>
2016-2025	<p><b>The New Digital Era of Migration</b></p> <p>2016 - 2023</p> <ul style="list-style-type: none"> <li>"Build A Wall" Campaign and Policies Implemented 2016</li> <li>2018 Zero Tolerance Policy</li> <li>The highest number of people ever recorded were killed attempting to cross the U.S.-Mexico border 2019</li> <li>Biden-Harris Administration relies on technology to secure the border 2021</li> <li>10/30/2023 Executive Order 13960</li> </ul>