16 TALK

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UNIVERSIDAD POLITECNICA DE YUCATAN 9B Computational robotics

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Conference Overview

The Yucatan Progress and Partnerships Conference 2023 is a pivotal event designed to showcase the advancements and collaborative efforts made by the Yucatan government in partnership with federal entities and private sectors. The conference provided an exclusive look at the progress achieved over the six-year term, introduce the Va y Ven public transportation system, and discuss the impact and future prospects of federal collaborative projects like the Mayan train.

Objectives

1. Highlighting Achievements

- Share detailed insights on policy implementations, infrastructure development, and socioeconomic growth attained during the six-year term.
- Discuss the challenges encountered and the innovative solutions that were employed to overcome them.
- Evaluate the impacts of these achievements on the well-being and prosperity of the Yucatan community.

2. Unveiling Va y Ven Public Transportation System

- Present the conceptualization, planning, and execution phases of the Va y Ven public transportation system.
- The system's features, benefits, and its pivotal role in enhancing mobility and reducing environmental impacts.
- Share future enhancements and expansions planned for the Va y Ven system to cater to the evolving needs of the populace.

3. Showcasing Federal Collaborative Projects

- Provide an overview of the Mayan Train project, outlining its objectives, progress, and expected impacts on the regional development.
- Discuss the synergy between the Yucatan government and federal entities in making the project a reality.
- Explore opportunities for future collaborative projects and how they can propel Yucatan into a new era of development and prosperity.

The city of Merida is experiencing significant growth, marked by several notable developments. A profitable bicycle system has been introduced by the municipality,

promoting both economic and environmental benefits. Employment is on the rise, evidenced by an impressive growth rate, underlined by positive safety reports reflecting a secure living environment. Furthermore, state universities are thriving, particularly in the advancement of engineering education, signifying a balanced growth encompassing transportation, employment, safety, and education. Each element contributes to the holistic development of the city, symbolizing a move towards comprehensive prosperity.

The Va y Ven public transportation system has significantly enhanced state mobility, marked by the introduction of new, air-conditioned units and an efficient electronic payment system, ensuring a comfortable and seamless travel experience for all users. Furthermore, the system underscores its commitment to inclusivity and affordability, offering preferential rates to students, seniors, and children. Each improvement is a testament to a multifaceted approach to transportation that combines innovation, comfort, and social consideration, marking a stride towards an era of comprehensive progress and prosperity for the entire community.

The Mayan Train, a joint initiative by the state and federal government, symbolizes an integration of communities and economic growth. Connecting various municipalities including Uman, Teya, and Chichen Itza, it stands as an emblem of cultural and social unity. Beyond transportation, the project expands into infrastructural development with the establishment of electric plants and gas piping. This comprehensive approach, merging transportation and infrastructure, epitomizes a future where sustainable energy and efficient transportation systems coexist, echoing a harmonious blend of ancient cultural reverence and modern innovation for holistic regional development.

Conclusion:

Merida and the broader state are on a trajectory of multifaceted growth, with pivotal advancements in transportation, employment, safety, and education. The integration of a profitable bicycle system and the Va y Ven public transportation augments urban mobility, marrying innovation with social inclusivity. Employment surges, backed by positive safety indices, portray a city and state where opportunity and security coexist. State universities are blossoming, particularly in engineering, signaling an educational renaissance. The Mayan Train epitomizes the synergy between the state and federal entities, a blend of cultural preservation, and infrastructural innovation. These collective strides depict a region not just evolving economically but maturing into a haven of holistic prosperity, where every facet of societal advancement is acknowledged, nurtured, and celebrated.

Evidence of the event





How Could we apply Machine Learning?

One of the most spectacular projects in my opinion that the government is carrying out is the "come and go" transportation, which is innovating transportation in the southeast of the country, but nevertheless, I have used transportation, and I consider that there are some improvements that could be implemented using unsupervised machine learning, since what could be done to optimize the routes is to create a clustering problem, to be able to see where people accumulate the most to wait. its transportation, to be able to reduce waiting time, and to be able to meet the high demand, likewise, to be able to see where most people get off, to be able to prioritize stops in those places, making use of clustering.

In addition, we will be able to optimize the route so that it can help the population and no longer suffer mobility problems, taking them to their destinations safely, quickly and efficiently. Reinforced learning can also be done to evaluate the best way to cover all those points needed using the least amount of unit resources.			