

Hurricane Tracking Using Neural Networks

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The Florida International University Modesto Maidique Campus (FIU-MMC) is an urban setting that is constantly developing, making it an ideal location for the development and implementation of innovative stormwater solutions for a sustainable future. FIU-MMC constantly faces issues regarding stormwater management due to the low ground elevation, frequent storms, and periodic hurricanes. We are taking the existing conventional stormwater systems, which traditionally rely on gray infrastructure and roadway design to control the flow of runoff, and implementing green solutions that complement and improve the existing systems. Not only are we proposing the implementation of sustainable stormwater technology, we are also restoring historical Florida ecosystems with the implementation of artificial wetlands across campus. We are using the existing features of the campus as an opportunity to provide an interconnected system that will mitigate flooding and stormwater pollution, reduce the urban heat island effect, improve air quality, and conserve water while providing recreational, educational, and aesthetically appealing green space for all to enjoy. EcoFlow aims to provide innovative, cost-effective, and sustainable solutions that will benefit FIU-MMC and the surrounding communities in environmental, social, educational, and economic aspects for future generations. Our designs will tackle FIU's long-term goals of using environmentally friendly designs to protect natural stormwater management and hydrological areas, conserve potable water, and interconnect existing and proposed stormwater systems. Our proposal will serve as a model, along with the FIU Master Plan, for sustainable and feasible solutions for our growing community.