AWS Automation using Boto3 and OpenCV

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Abstract*: This study addresses the challenge of automating the management and processing of visual data in cloud environments using AWS and OpenCV. Traditional methods for large-scale image and video processing are manual and inefficient, leading to increased operational costs and inconsistencies. The proposed framework leverages Boto3 to integrate AWS services, including Amazon S3, AWS Lambda, and Amazon Recognition, for seamless automation of data handling and processing. By streamlining workflows and optimizing resource utilization, the framework enhances scalability and efficiency in diverse applications, such as real-time surveillance, medical imaging, autonomous navigation, and multimedia content management. This automated solution aims to reduce manual intervention and deliver a robust, scalable, and flexible approach to visual data processing in the cloud*

Keywords: Automation, AWS, Boto3, Cloud Computing, OpenCV, Visual Data Processing