

Informatics Institute of Technology, Sri Lanka

In collaboration with  
University of Westminster, UK

**COST-EFFECTIVE AND ADAPTABLE IMAGE PROCESSING  
SYSTEM IN SERVERLESS MODE**

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A dissertation submitted in partial fulfillment of the requirement for Bachelor of Engineering  
(Hons) Software Engineering Degree Department of Computing

**2021**

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## Abstract

Cloud computing has already made a huge impact on the IT industry, nowadays most of the IT infrastructure is moving towards the cloud. The reason behind the success of cloud environments is they provide the resources to the applications to grow easily and free. When it comes to big data, image processing plays a huge role. Image processing is one of the essential requirements in most data science applications and many other applications.

Serverless computing is one of the emerging technologies in the cloud computing world. Serverless computing models help both users and cloud vendors to utilize the resources in the cloud. Serverless models provide benefits to both cloud users and vendors, users will be able to deploy their applications in a cost-effective manner and users will have higher flexibility when they deploy and manage the cloud applications.

Developing a cost-effective model for cloud-based image processing is an essential requirement, with the rapid development of the big data field. When it comes to image processing in cloud environments, those image processing systems required a huge amount of computation power and resources, because of that system cost becomes high. And, when the system grows systems need to change frequently and the complexity of the systems does not allow users to change their systems easily. These issues will address by the novel architecture and design that will be introduced by the “*Serverless Image Processor.*”

Key Words -: Cloud Computing, Image processing, Serverless Computing