

# Head Count Detection Using a Docker Swarm Cluster

ANURAG KUMAR JAIN<sup>1</sup>, PRATIK SUSHIL JAIN<sup>1</sup>, AND RONAK PAREKH<sup>1</sup>

<sup>1</sup>School of Informatics and Computing, Bloomington, IN 47408, U.S.A.

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**By deploying our face detection application on Docker cluster, we will try to achieve high throughput by parallelizing processing of images for head count task on multiple nodes each having thousand of pictures.** © 2017 <https://creativecommons.org/licenses/>. The authors verify that the text is not plagiarized.

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<https://github.com/cloudmesh/sp17-i524/tree/master/project/S17-IR-P011>

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## 1. INTRODUCTION

Counting the number of people in a image has been a challenge in the field of computer vision [1]. Given a huge number of images, finding the number of people in each image can become a cumbersome task. We try to solve this issue using our distributed approach using a docker swarm cluster which is a cluster of Docker [2] engines, or nodes, where services have to be deployed. We run the OpenCV [3] face detection algorithms on smaller data in multiple nodes and obtain the head count of the people in each picture.

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