

Department of Mathematics ^{香港城市大學}

DEPARTMENT OF MATHEMATICS City University of Hong Kong

Automatic visual inspection for industrial object anomaly detection

by

Mr. Aitor Artola École Normale Supérieure Paris-Saclay, France

Date: 20 October 2023 (Friday) Time: 3:00 – 4:00 pm Venue: B5-208, Yeung Kin Man Academic Building

ABSTRACT

In this talk, I'll introduce the problem of anomaly detection in computer vision. After a brief description of the problem with examples, I'll survey the evolution of mathematical models for anomaly detection. Then I'll illustrate how, nowadays, neural networks improve data representation. The current state of the art combines previous mathematical models with semantic features calculated by neural networks. In my recent work, I model neural semantic features through a Gaussian mixture model. In that way, anomalies are detected as low probability events in this stochastic model.



~ALL ARE WELCOME~