Gaussian Mixtures in Machine Learning

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Abstract—**Gaussian or Normal models help us to represent most of the distribution of all aspects of the world, showing how they can spread regarding the possibility for it to happen. This Gaussian models can allow us to distinguish between different set of points in an image for example. But in certain cases a point can be part of different groups. In this case Gaussian Mixtures can allow us to represent patterns which have elements in common. Gaussian Mixtures can be used in different fields. For example, to generate cancer detection algorithms.**

Index Terms—**Gaussian Mixtures, Deep learning, Machine learning.**

I. INTRODUCTION

In [4] and [3] we find a description on how Gaussian mixtures work in a general way. In reference [1] is described how deep learning algorithm can be represented as Gaussian mixtures. And in [2] and [5] we can find examples on how to use Gaussian Mixtures to detect and predict pancreatic and liver cancer.

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