
A PSF estimation method using gaussian mixtures

Pedro Escarate^{*†1}, Maria Coronel^{*2}, Angel Cedeño^{*2}, and Juan Carlos Agüero^{*3}

¹Escuela de Ingenieria Electrica, Pontificia Universidad Catolica de Valparaiso – Chile

²Electronics Engineering Department, Universidad Técnica Federico Santa María – Chile

³Electronics Engineering Department, Universidad Técnica Federico Santa María – Chile

Abstract

It is well known that one of the main challenges of adaptive optics (AO) corrected images post-processing is the missing of information about the Point Spread Function (PSF) of the optical system. Typically, the PSF is not always available and therefore it is necessary to estimate the PSF from the scientific images or the AO system telemetry. In this work we address the PSF estimation and deconvolution using a finite gaussian mixture.

Keywords: Gaussian, PSF, AO

^{*}Speaker

[†]Corresponding author: Pedro.escarate@pucv.cl