

LIGHT FIELD PHOTOGRAPHY ON NO BUDGET

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ABSTRACT.

1. INTRODUCTION

Light field photography involves using a spatially distributed array of cameras to capture a single scene in order to provide higher quality imaging and novel post processing tools. Several high profile papers have been published from Stanford's research lab, and a spinoff company called Lytro has been formed selling consumer cameras based upon this technology.

Even so, all existing light field cameras have been large and expensive. This paper covers the development of a Raspberry Pi based computational camera in order to bring Light Field imaging to a wider audience.

2. HARDWARE