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Title: Automated Anamorphic Projections on Planar and Arbitrary Surfaces

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An anamorphic projection is an image that is intentionally distorted so that the original image can be seen only from a certain perspective, or using a special device, for example a mirror. The goal of this project is to apply computer vision techniques to create a program that automates the process of generating anamorphic projections. We use a projector-camera system to derive homography mappings between the projector image and the projection surface, and propose a method for generating an optimal anamorphic image for multiple viewers using the least-squares estimation.