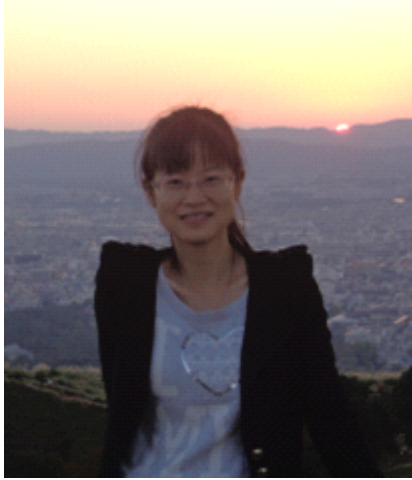


## 黄欢



研究方向：计算机视觉

workshop 课题： Detection of a Moving Object and Its Shadow

Lab stay 课题： Registration and Shadow Detection for AR Marker Hiding

### Description of Lab stay project:

We develop a system to remove AR markers from video images to achieve truly seamless fusion of virtual objects and the real world. To generate texture as the same as the true region covered by AR marker, a background image is first captured before putting a marker in the system. After putting a marking, the marker is removed from a current image by overlaying the background texture captured beforehand on the marker. In our processing, to overlay the background texture at precise position, we make a registration between the current image and background image using a homography that is calculated by SURF matching feature points. In addition, we use the ratio of the surrounding area of AR mark of background and that of current image to reflect the shade and shadow changes and achieve photometric consistency.

### 学习感受:

实验室参观过程和 workshop 期间，让我了解科学研究并不是只看论文，做仿真那么枯燥无趣和没有实际用处，其实各学术研究每前进一个脚步都能在我们日常生活中体现。我真正认识到科学研究的魅力和英语表达能力对做研究的重要性。

在实验室学习环节，虽然我的任务是完成一个简单的工程，但是从我和实验室导师、学生一起交流讨论的过程中，了解到一起有针对性的讨论问题是一种快速的有效的学习路径，并且学习了他们对科研认真、谦虚和精益求精的态度。

这次学术交流不管是学术态度还是生活细节都对我有着深刻影响。我希望以后能多参加这种学术交流活动，增长自己的见识，锻炼自己的能力。