

## A powerful and multifunctional Interior design software

嚴寬、周遠同、詹承諺、張永毅

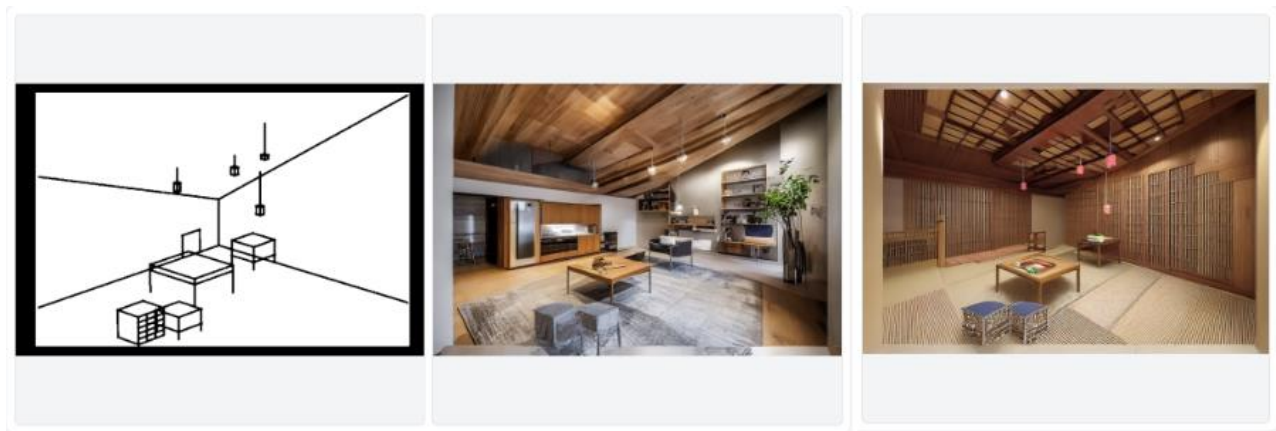
1 Near Sawrey, Ambleside, UK

2 Cupboard under the Stairs, 4, Privet Drive, Little Whinging, Surrey, UK

\*Corresponding author: (No)

### Abstract

Recently, a powerful neural network—"ControlNet" has been released, which can turn a simple hand drawing into a delicate render image(see fig.1). After that, you can add some text to prompt it to generate in a certain style. Based on it, we launch an easy-to-use interior design software.



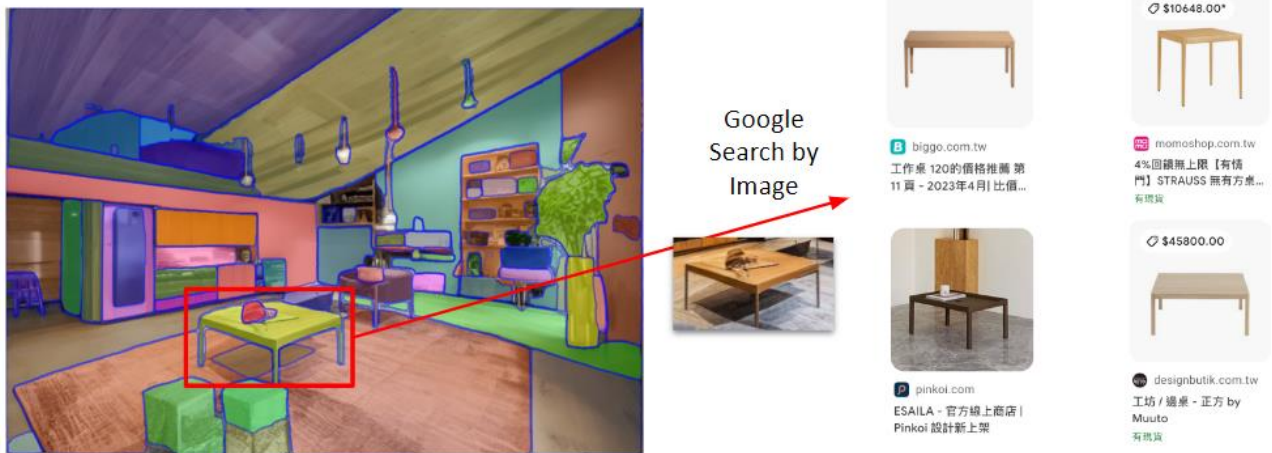
(Figure 1)

Besides, we concatenate it with SAM(**Segment Anything Model**), which can segment all objects in the picture(see fig.2), that is furniture in our project. Then, users can pick the one they like.



(圖二)

After selecting, the software will provide some purchase information about the furniture(see fig.3) by ChromeDriver. Afterward, Interior design will be something that everyone can lightly get started with.



(圖三)

## References

Fatichi, S., Rimkus, S., Burlando, P., Bordoy, R., and Molnar, P. (2013), Elevation dependence of climate change impacts on water resources in an Alpine catchment, Hydrol. Earth Syst. Sci. Discuss., 10, 3743-3794.

## 一款強大且多功能的室內設計軟體

P. Rabbit<sup>\*1</sup>, H. Potter<sup>2</sup>

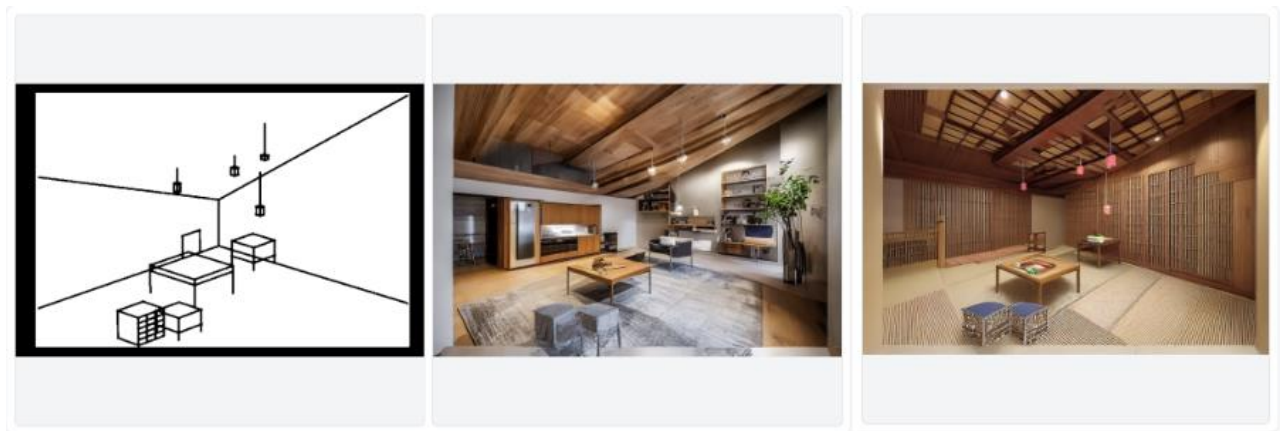
1 Near Sawrey, Ambleside, UK

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\*Corresponding author: [p.rabbit@beatrixpotter.co.uk]

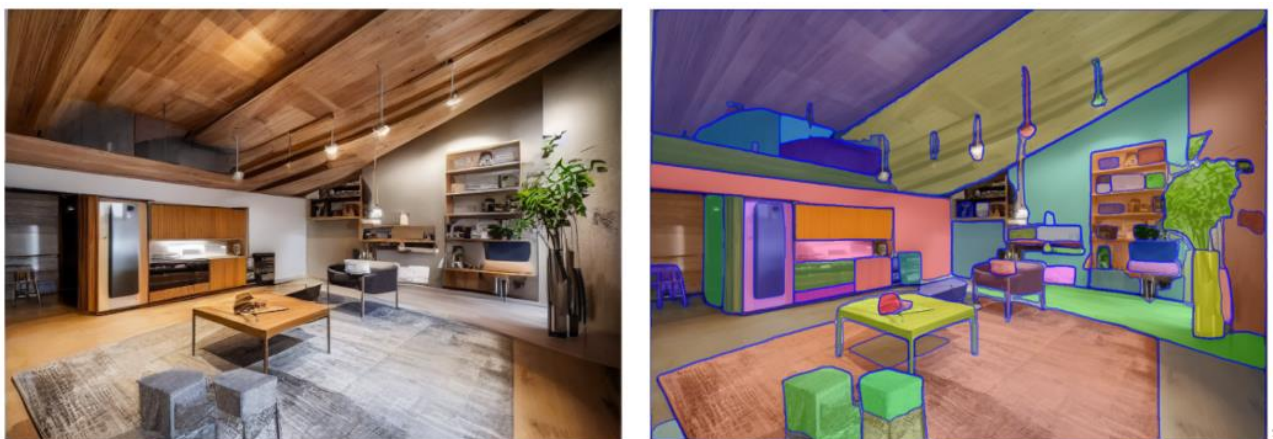
### Abstract

近期，一款強大的神經網絡--"ControlNet"釋出，他能將簡易的手繪素描，轉成精美的實景圖片，再加上文字描述，還可以轉成特定的風格(見 圖一)。我們以此模型為基礎，建立一個一般人也能輕鬆上手的室內設計軟體。



(圖一)

除此之外，我們將其套上 **SAM(Segment Anything Model)**，他能分離畫面中的所有物體(見 圖二)。在本文中，也就是家具的部分，以提供使用者選取他們喜歡的家具。



(圖二)

選取之後，將連結到我們提供的以圖搜圖的程式碼，會立即在畫面中顯示相關的購買資訊(見 圖三)。此後，室內設計，將是人人都可以輕鬆上手的事情。



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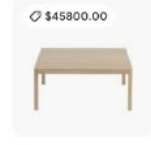
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(圖三)

## References