Skills Assessment Project

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| Rendered.AI 50 116th Ave SE, Suite 100 Bellevue, WA 98004 |  |

This skills assessment is being performed by the applicant as part of the application process at Rendered.AI. The task is intended to be performed by the applicant alone, but is otherwise ‘open book,’ leveraging available online tools, resources, message-boards, and documentation.

* **Description of Task**

A python script that will modify the paint job on AWACs Aircraft and render ten unique output images using the Blender Python API. Blender is available at <https://www.blender.org/> and we are using a 2.9X version, but the candidate may use another version, if desired.

(i) Use “blender Boeing\_E3.blend *--*background --python *scriptname.py”* from the command line to call the script.  
 (ii) The script will open the Blender file provided and make modifications to the aircraft.  
 (ii) Modify the node-based Shader Editor via script to change the paint job of the body of the aircraft to give the plane a camouflage. Only modify the body and wing materials, do not modify the dome or other aircraft materials.  
 (iii) Create a camera and a sun object in the script and apply the appropriate settings.  
 (iv) Generate 10 renders of the aircraft, each with a new color and pattern of camouflage.

Hint: This project is designed as a trial-by-fire approach to integrating you with the team, to get you asking questions and doing research on your own. It is recommended that you first use the Blender GUI to implement the node-tree in the Shader Editor to modify the body of the aircraft, then implement the changes via script. The Info and Python Console editors in Blender are useful resources as is the Blender Documentation found online to figuring out relationships and python calls to make, but if you have any questions don’t hesitate to ask.

* **Description of Deliverables**

The python file used for I(i) and the ten rendered images of the plane from I(iv).

* **Schedule**

The schedule for the work product described above shall adhere to the dates below:

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| Start Date | When received |
| End Date | When possible |
| Deliverable Date | When possible |
| Estimated Total Hours | 2-4 hours |

* **Response**

Completed project deliverables should be sent to [ethan@rendered.ai](mailto:ethan@rendered.ai) and [chris@rendered.ai](mailto:chris@rendered.ai).