

GRVM
Virtual Reality and Multimedia
Research Group

Aircraft Interior Design Using Photorealistic Augmented Reality

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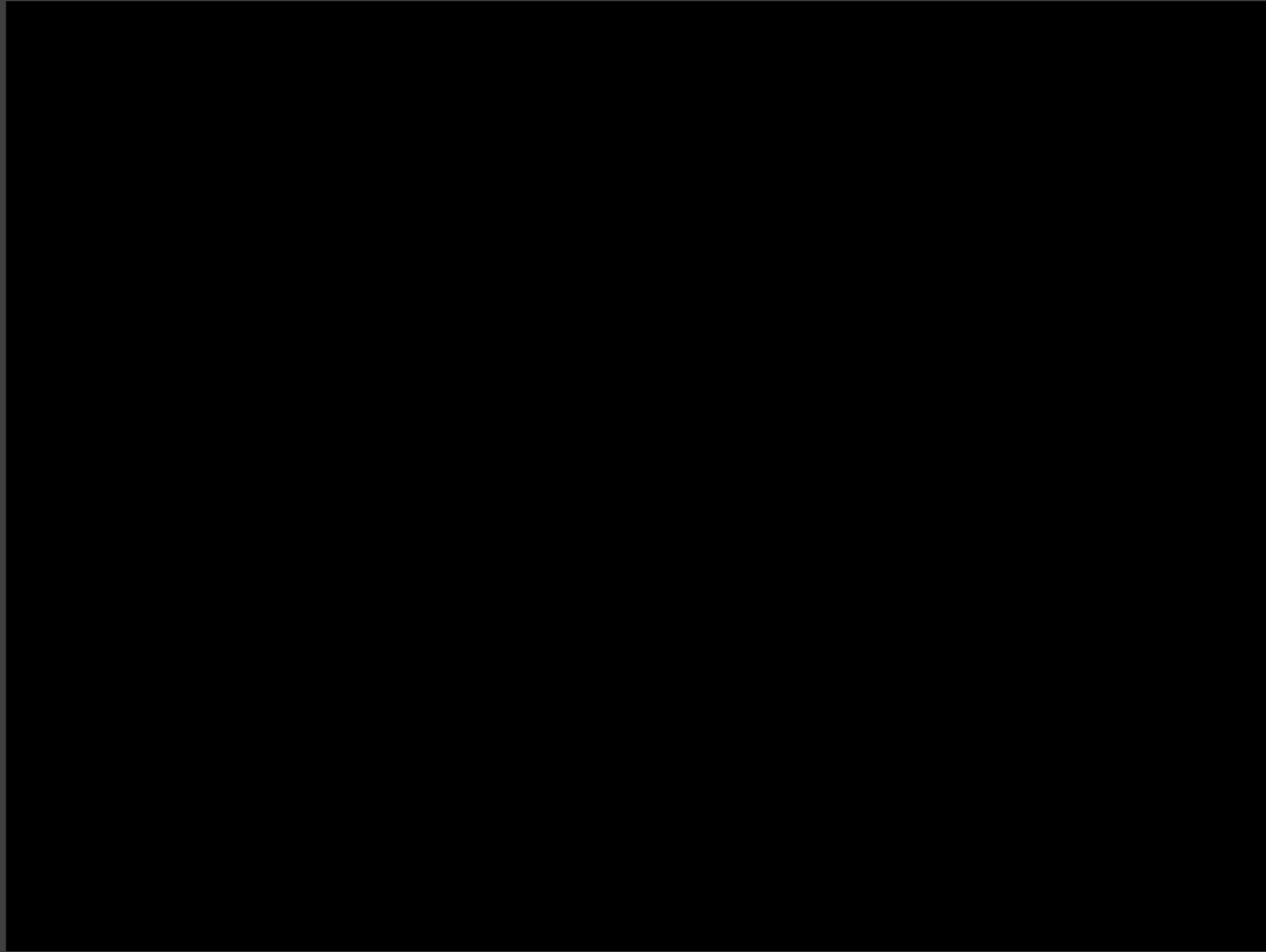
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Team Expertise



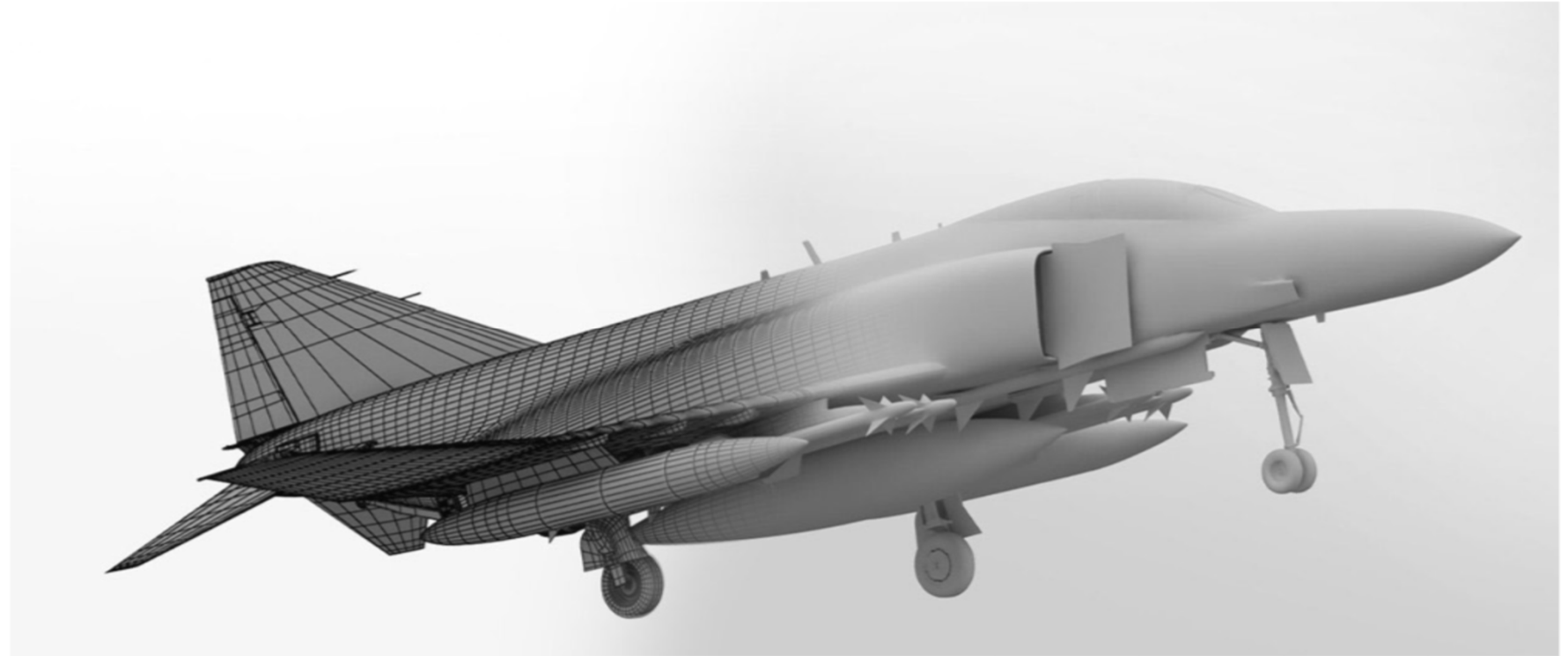
Team Expertise



Augmented Reality



Realistic Rendering



Realistic Rendering



Interior Design



Interior Design





Goals

- ▶ Develop an photo realistic AR visualization tool for aircraft's interior design
- ▶ Create an authoring tool for aircraft's interior design
- ▶ Implement a support pipeline for both applications including real-time rendering techniques



Benefits

- ▶ Faithful representation of the proposed prototype
- ▶ Ease to apply changes to the prototype
- ▶ Quickly present these to customers
- ▶ Avoiding costly engineer changes at the late completion stages
- ▶ Realistic look and feel customer experience



Disadvantages

- ▶ Appropriate infrastructure
- ▶ Trained staff
- ▶ Customer presence at the factory



Challenges

- ▶ Obtain scene geometry
- ▶ Acquire light source's characteristics
- ▶ Optimize algorithms for real-time rates
- ▶ Meet user's expectations



Thank you

Judith Kelner

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