



# Characters To Get Immersed In

## Creating the cast of Blood & Truth

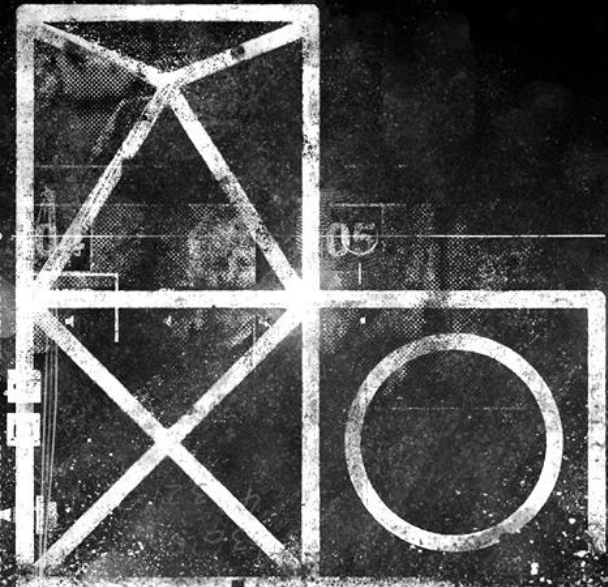
Toby Hynes  
Lead Character Artist  
Sony London Studio

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# INTRO

LONDON STUDIO



London Studio

# BLOOD & TRUTH

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# INTRO

## LONDON STUDIO

26/GS/OPT3/187



Groundbreaking  
VR Games

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# INTRO

LONDON STUDIO

26/GS/OPT3/187



Experiences that  
introduced players  
to PlayStation:VR.

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# INTRO

LONDON STUDIO

26/GS/OPT3/107



The London Heist by far  
the most popular of these.

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# INTRO

LONDON STUDIO

26/GS/OPT3/187



*'...it felt so real when the main characters were talking to me. I would say things back to them and, though they couldn't hear me, it just felt so realistic.'*

*'Agreed! I was amazed at how intimidating it was to have a virtual person invade your personal space.'*

*'There are challenges to not flinch at certain things such as having a gun waved in your face or when the guy punches you. First time it was a knee jerk reaction. It's so immersive'*

*'I remember going "Wow" at the sense of scale when standing there as the gangster in the opening scene walks up to you. It's amazing how immersive it is'*

Players really enjoyed character interactions.

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# VR COMMANDMENTS

ARE NOT SET IN STONE



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# VR COMMANDMENTS

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Realistic doesn't  
translate well in  
VR.

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# VR COMMANDMENTS

ARE NOT SET IN STONE



The characters in  
The London Heist  
were stylised.

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# VR COMMANDMENTS

ARE NOT SET IN STONE



Making highly realistic game characters is very subjective.

# VR COMMANDMENTS

ARE NOT SET IN STONE



Players don't like to play as other people as it breaks immersion'.



# VR COMMANDMENTS

ARE NOT SET IN STONE



What if the whole  
premise was 'Be  
the action hero'?

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# VR COMMANDMENTS

ARE NOT SET IN STONE



Playing as Batman  
in VR is very  
cool.

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# VR COMMANDMENTS

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Image captured from PlayStation®4 Pro and reformatted for non-VR display

You are Ryan Marks.

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# SCANNING & PHOTOGRAMMETRY

## INITIAL INVESTIGATIONS



If you are making realistic characters then scanning makes a lot of sense.



# SCANNING & PHOTOGRAMMETRY

## INITIAL INVESTIGATIONS



We imported stock scan models into the engine to assess in the headset.

# SCANNING & PHOTOGRAMMETRY

## INITIAL INVESTIGATIONS



We decided to look at  
hand held 3D scanners.



# SCANNING & PHOTOGRAMMETRY

## INITIAL INVESTIGATIONS



I organised an on site demo with Artec scanners

# SCANNING & PHOTOGRAMMETRY

## INITIAL INVESTIGATIONS



Captured clothing deformation from poses.



# PRE-PRODUCTION

R&D, BENCHMARKS  
& WORKFLOW



Normal map  
blending to  
simulate cloth  
deformation.

# PRE-PRODUCTION

R&D, BENCHMARKS  
& WORKFLOW



Normal map  
blending to  
simulate cloth  
deformation.



# PRE-PRODUCTION

R&D, BENCHMARKS  
& WORKFLOW



Benchmark character.

# PRE-PRODUCTION

R&D, BENCHMARKS  
& WORKFLOW



Facial animation  
tests.

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# PRE-PRODUCTION

R&D, BENCHMARKS  
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Facial animation  
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# BLOOD & TRUTH CHARACTERS

## CHARACTER TIERS



Tier 2. Modular  
NPCs. All scanned  
in-house.



# BLOOD & TRUTH CHARACTERS

## CHARACTER TIERS



Tier 2. Modular  
NPCs. All scanned  
in-house.

# BLOOD & TRUTH CHARACTERS

## CHARACTER TIERS



Costumes sourced  
for Tier 1 & 2.



# BLOOD & TRUTH CHARACTERS

## CHARACTER TIERS



Licensed  
military gear  
from DevTac,  
Mechanix, Crye  
Precision &  
Bates Footwear.

# BLOOD & TRUTH CHARACTERS

## CHARACTER TIERS



Single 'Generic' male base model and rig.



# BLOOD & TRUTH CHARACTERS

## CHARACTER TIERS



Tier 2 heads. Mix  
of staff and off  
the shelf.  
Identical topology  
and UVs.

# BLOOD & TRUTH CHARACTERS

## CHARACTER TIERS



Tier 2 modular parts.



# BLOOD & TRUTH CHARACTERS

## CHARACTER TIERS



Tier 2 modular parts.

# BLOOD & TRUTH CHARACTERS

## CHARACTER TIERS



Tier 2 Brands.



# BLOOD & TRUTH CHARACTERS

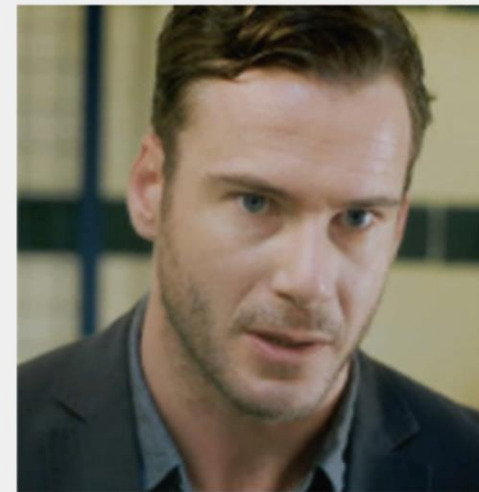
## CHARACTER TIERS



For Tier 1 characters we cast real actors and costumed them.

# BLOOD & TRUTH CHARACTERS

## CHARACTER TIERS



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real actors and  
costumed them.



# BLOOD & TRUTH CHARACTERS

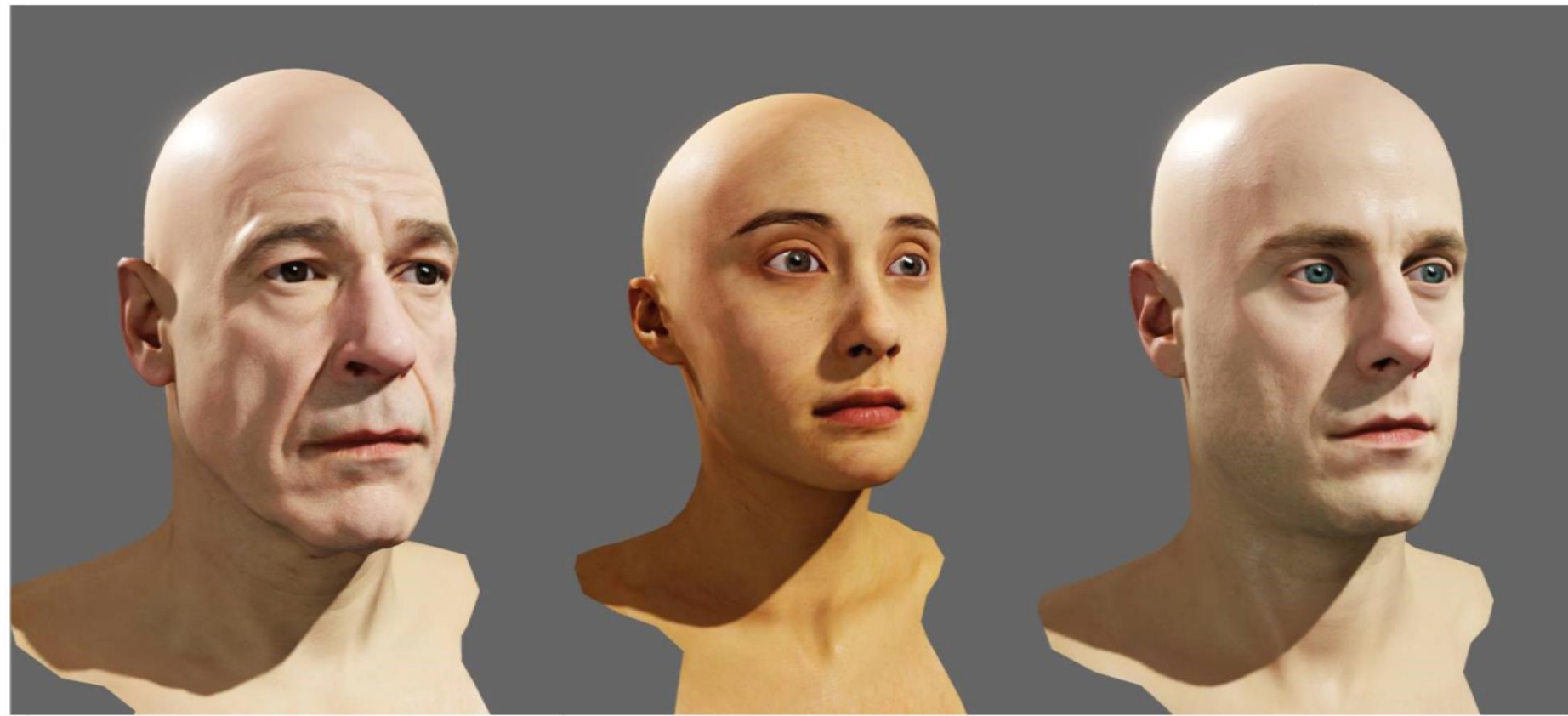
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# BLOOD & TRUTH CHARACTERS

## CHARACTER TIERS

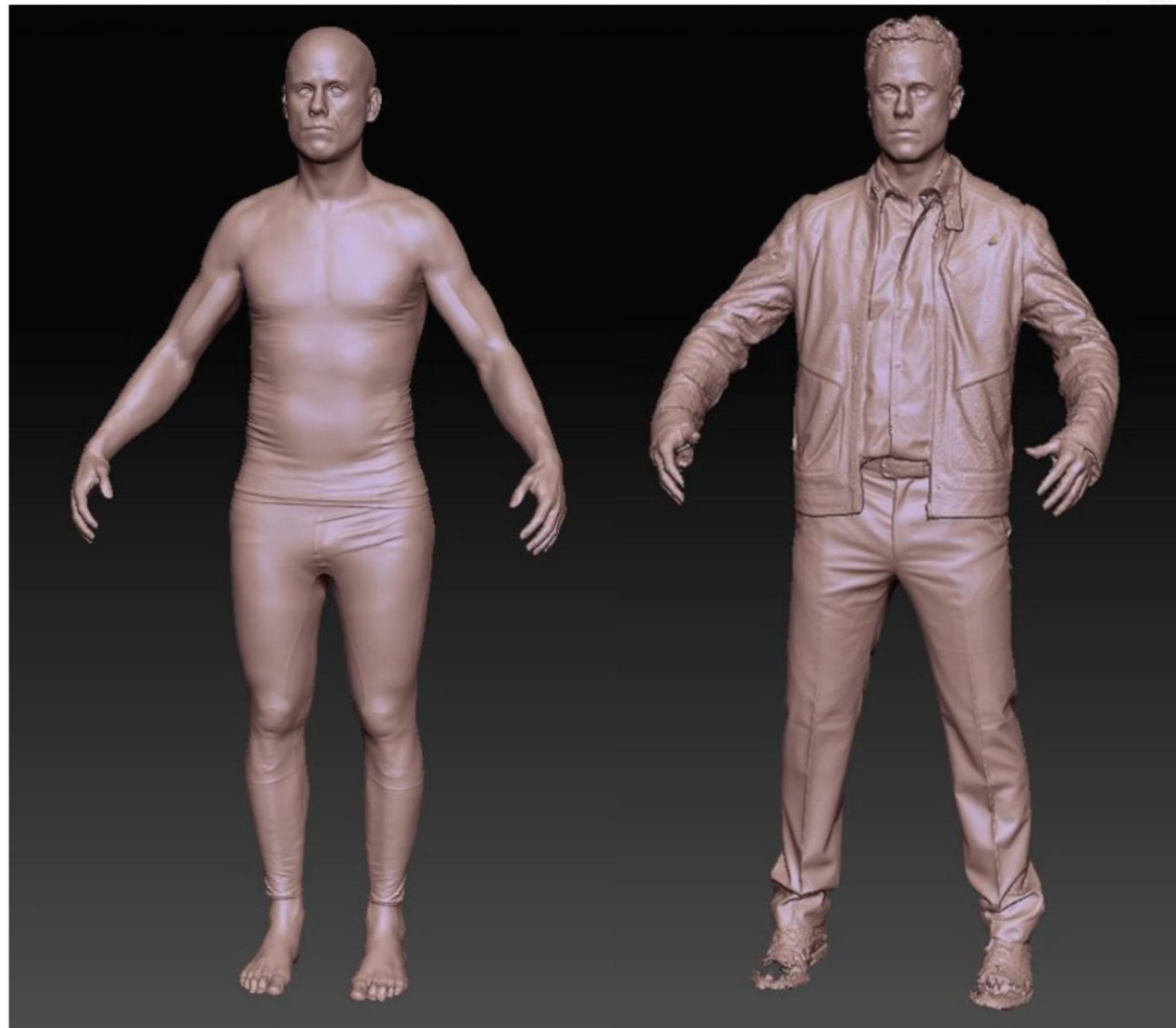


We chose 3Lateral  
for our Tier 1  
heads.



# BLOOD & TRUTH CHARACTERS

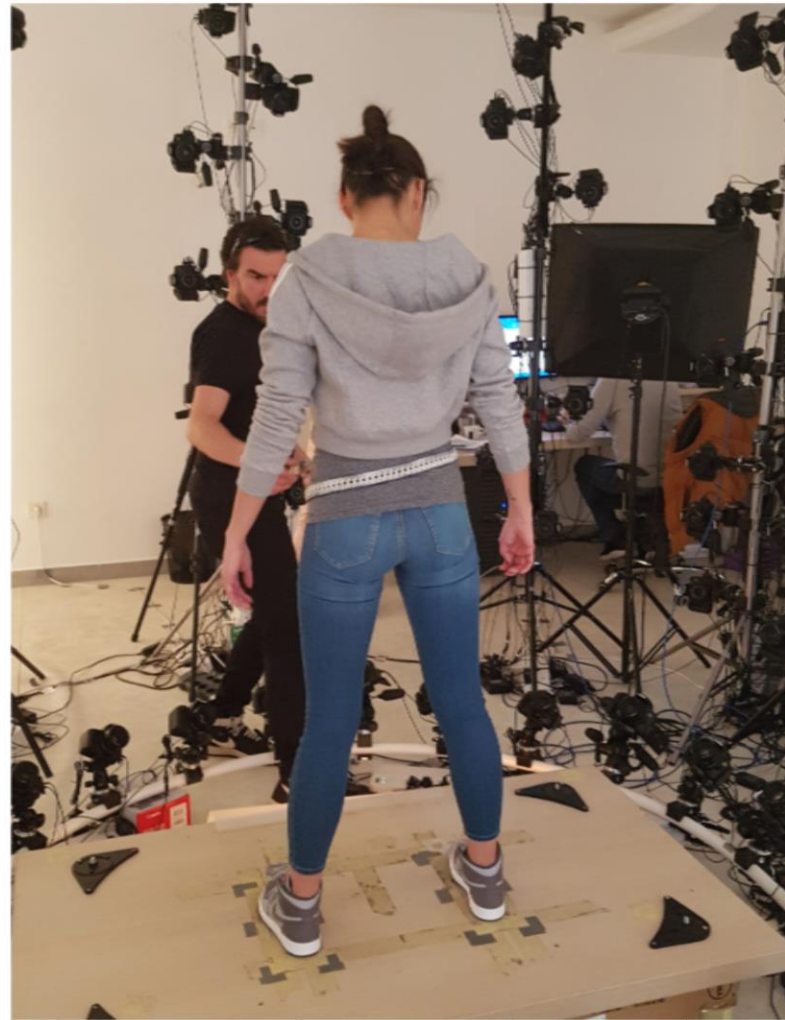
## CHARACTER TIERS



We create a base body for actor to use as a mannequin for the clothed version.

# BLOOD & TRUTH CHARACTERS

## CHARACTER TIERS

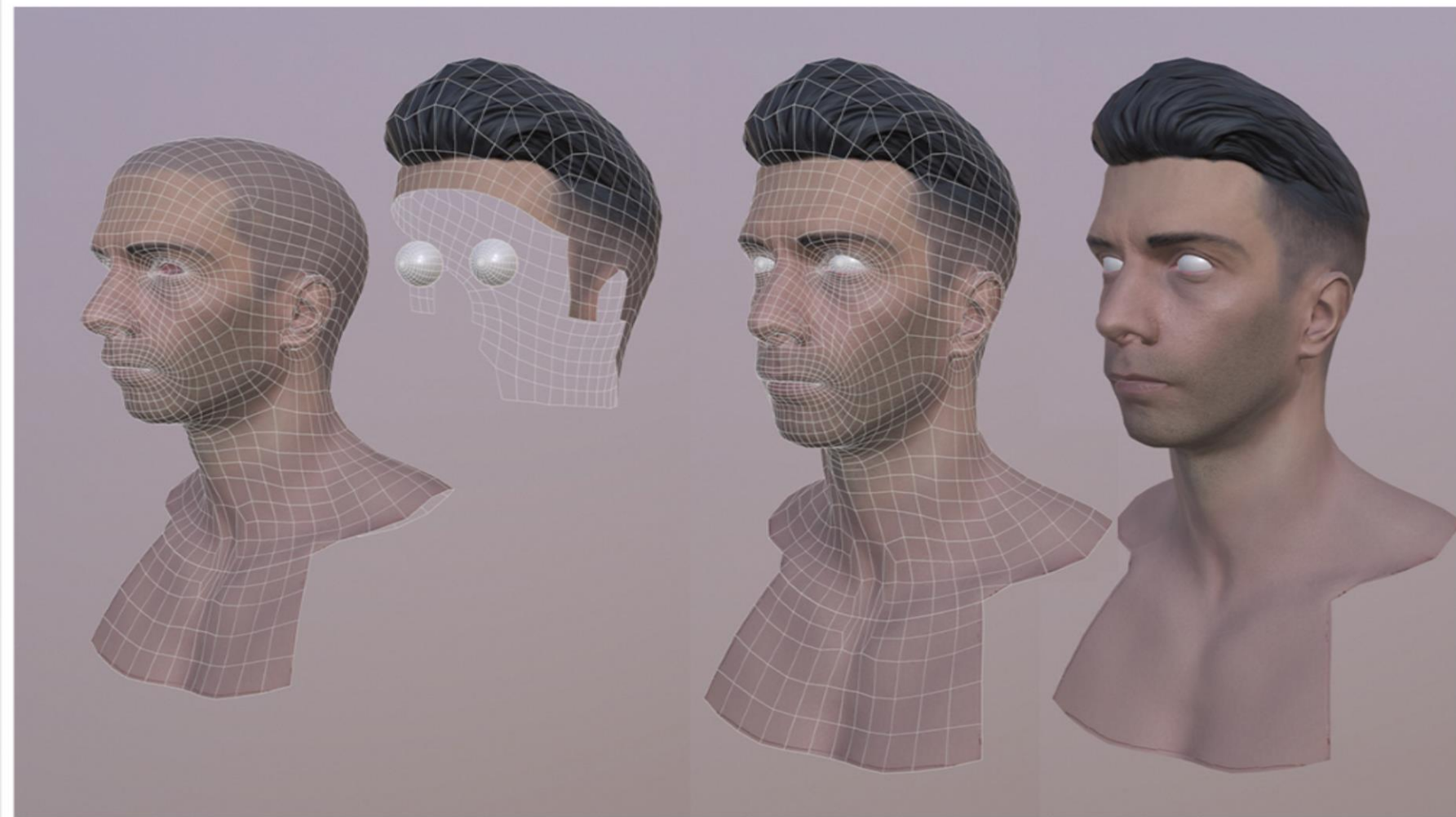


We scanned a neutral pose and a set of poses for our cloth deformation maps.



# BLOOD & TRUTH CHARACTERS

## CHARACTER TIERS



Hair in VR is a challenge.

# BLOOD & TRUTH CHARACTERS

## CHARACTER TIERS



Hair in VR is a challenge.



# BLOOD & TRUTH CHARACTERS

## CHARACTER TIERS

Michelle



# BLOOD & TRUTH CHARACTERS

## CHARACTER TIERS

Deacon





# BLOOD & TRUTH CHARACTERS

## CHARACTER TIERS

Nick



# BLOOD & TRUTH CHARACTERS

## CHARACTER TIERS

Tony





# BLOOD & TRUTH CHARACTERS

## CHARACTER TIERS



Tier 1 clothing deformation.

# BLOOD & TRUTH CHARACTERS

## CHARACTER TIERS



Tier 1 clothing deformation.



# VR CHALLENGES

ALSO OPPORTUNITIES



The player is  
the camera.

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# VR CHALLENGES

ALSO OPPORTUNITIES



Details on  
the Avatar  
hands.

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# VR CHALLENGES

ALSO OPPORTUNITIES



The devil  
is in the  
detail.

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# ASSEMBLING & REVIEWING IN VR

TECH & TOOLS



Character  
Assembler  
and viewer.

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TECH & TOOLS



Character  
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# ASSEMBLING & REVIEWING IN VR

TECH & TOOLS



Reviewing  
characters  
in VR.

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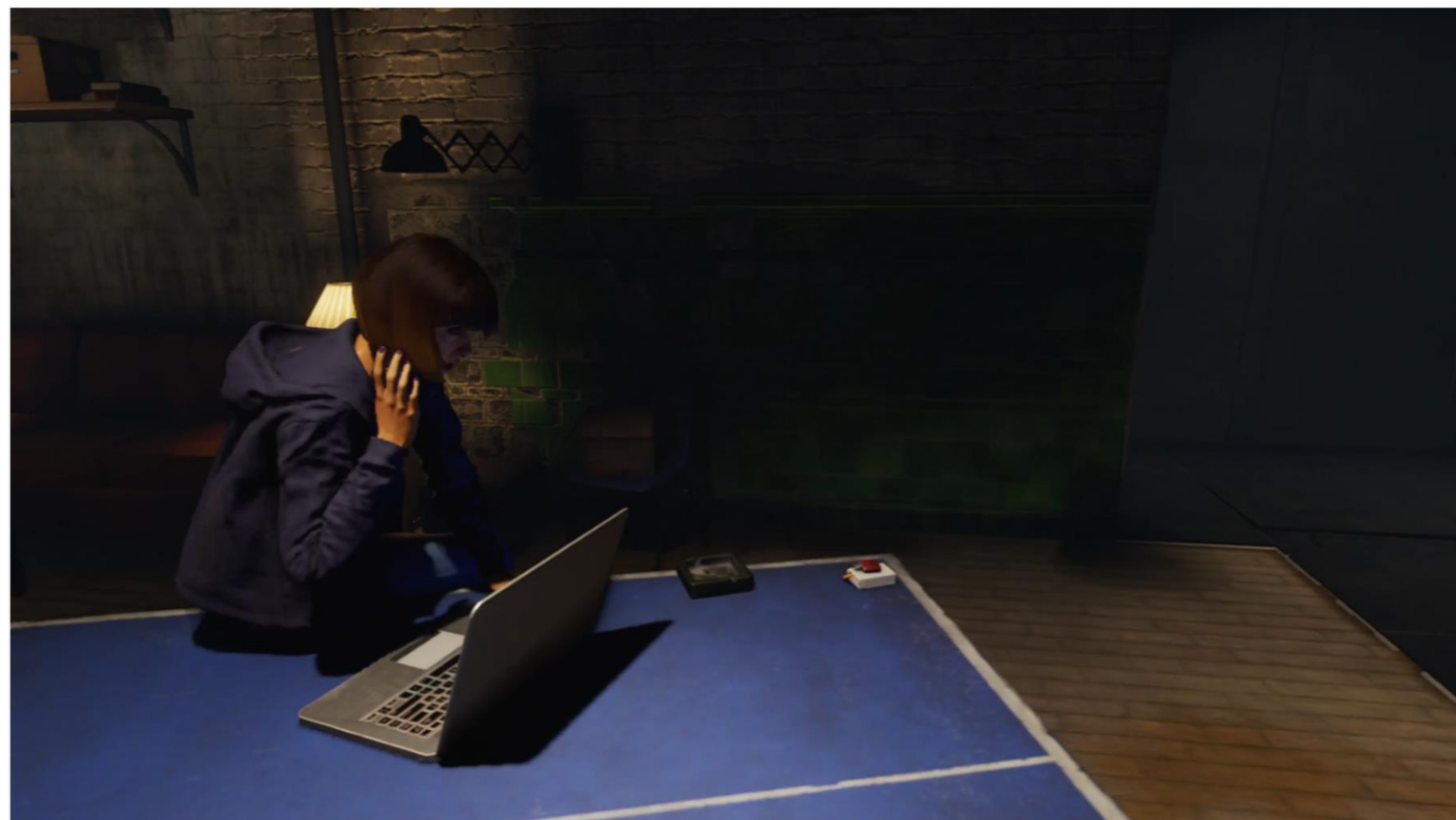


# IN CLOSING

## Big thanks to:

- LS Character Team: Rob & Matthieu
- The Character team at Elite 3D
- The team at 3Lateral
- James 'The Answer' Answer
- Our Animation & Tech Anim teams
- Our cast
- The London Studio team
- Daniel Aasheim

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QUESTIONS?



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