

# Martin Luther as an AI-Powered Real Life Avatar. Technical and Theological Challenges and Considerations



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# 1. The Idea, the Premiere and First Learnings

# The AI XR Martin Luther Avatar

- Goal: To translate Luther's message into the present, enabling direct interaction with Martin Luther
- Experiment: Exploring how AI can be used in a church context
- The AI XR Martin Luther premiered on YouTube on Reformation Day (October 31) 2023. The audience could engage with the avatar via YouTube live chat
- Media coverage by Germany's national radio Deutschlandfunk, Vatican News, and WDR television



# Insights from the Premiere

- **High interest** and curiosity from the audience and media
- **General perception:** The Avatar conveys what Martin Luther would say today, enhancing immersion.
- **Audience testing the Avatar's limits:** Questions range from practical topics like jump-starting cars to complex issues such as Luther's views on antisemitism.
- **Possible use case of the Avatar:** Relevant for (Protestant) religious and history education.

# Why Martin Luther?

- Recognition and identification through the Cranach portrait
- Avatar modeling based on Cranach's depiction
- Extensive text corpus of Martin Luther and secondary literature about Martin Luther (in ChatGPT's LLM) available



# Avatar Design (1): Authenticity versus Historicity

- **Early** versus late **Luther**
- Attire: Historical Lutheran chasuble or **Prussian clergy robe** (19th century) with united bands – recognizable as a Protestant pastor.
- Size: **Average size of today** or the 16th century?
- Language: Saxon pronunciation or **High German**?

## Avatar Design (2): Challenges

- Handling controversial statements by Luther (Antisemitism, Peasants' Wars)
- Prevention of the spread of antisemitism through prompts and manual filtering (at the premiere)
- Emphasis: AI provides a possible interpretation of Martin Luther
- Transparency through the publication of prompts
- Development of media literacy by addressing these issues



# Potential for Immersion and Educational Engagement: “Martin Luther, would you today be a climate activist blocking roads?”

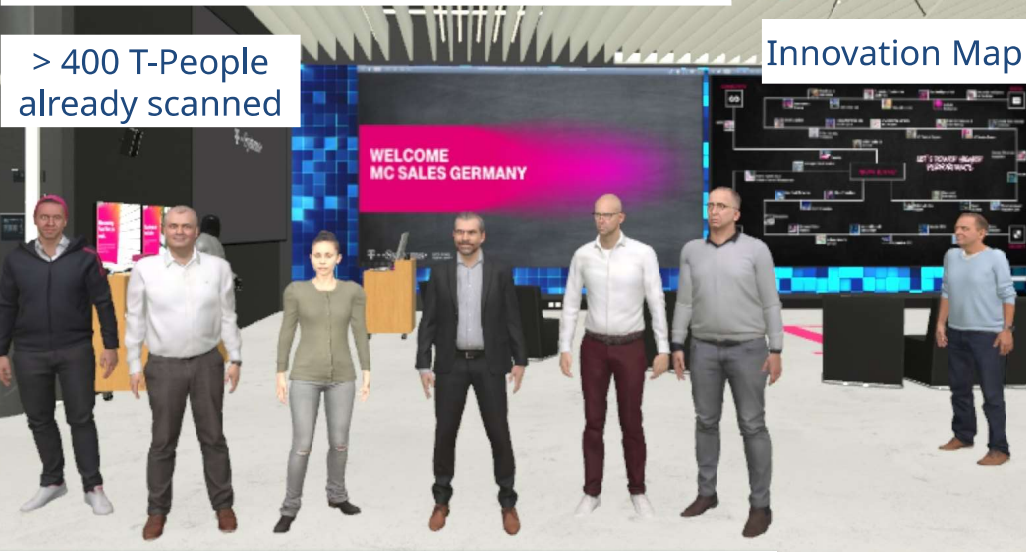
- The project explores Martin Luther's expressions as they might be interpreted today, with AI offering *one possible* interpretation.
- The Luther avatar serves as an *experimental tool* to make Reformation messages accessible to modern audiences.
- Potential applications include history *education*, religious instruction, and confirmation classes.
- Users may *forget they are interacting with an AI representation* and not the historical figure of Martin Luther.



## 2. The Technology: AI, Metaverse and Cloud Services

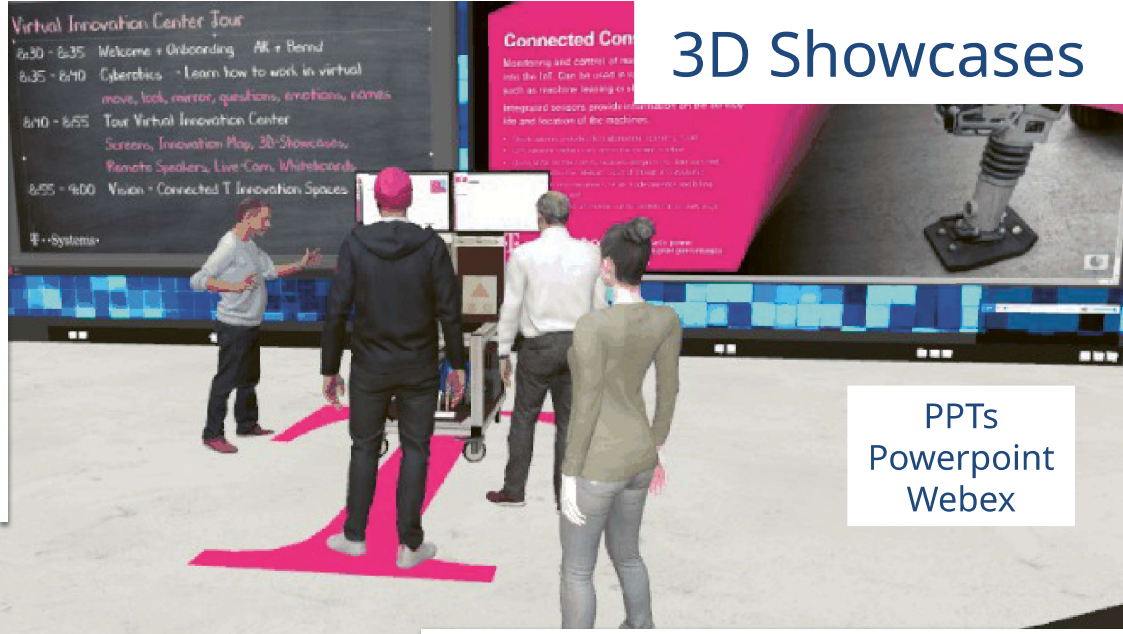
# Personalized Avatars

> 400 T-People  
already scanned



Innovation Map

# 3D Showcases



PPTs  
Powerpoint  
Webex



Collaborate Whiteboards, Polls...



Live Cams

React to people



...was to "revive" the reformer Luther through the use of AI as a photorealistic avatar in the metaverse and to use him as a source of inspiration

## The idea



# The Avatar Part 1



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A three-dimensional head was first generated from various historical paintings, with the well-known portrait by Lucas Cranach the Younger as leading model, with the help of generative AI

# The Avatar Part 2



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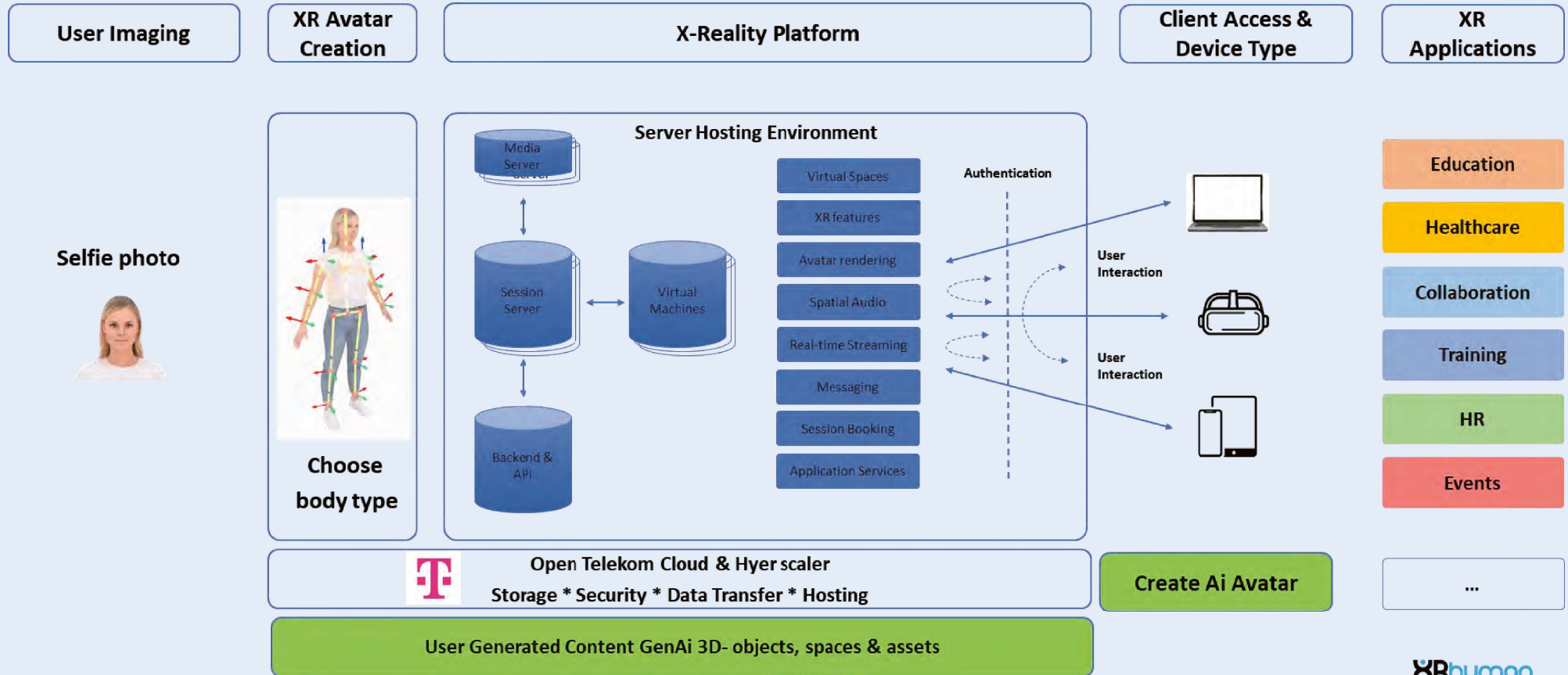
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For the avatar's "body",  
a real person in a gown  
was scanned with a  
high-resolution 3D  
scanner

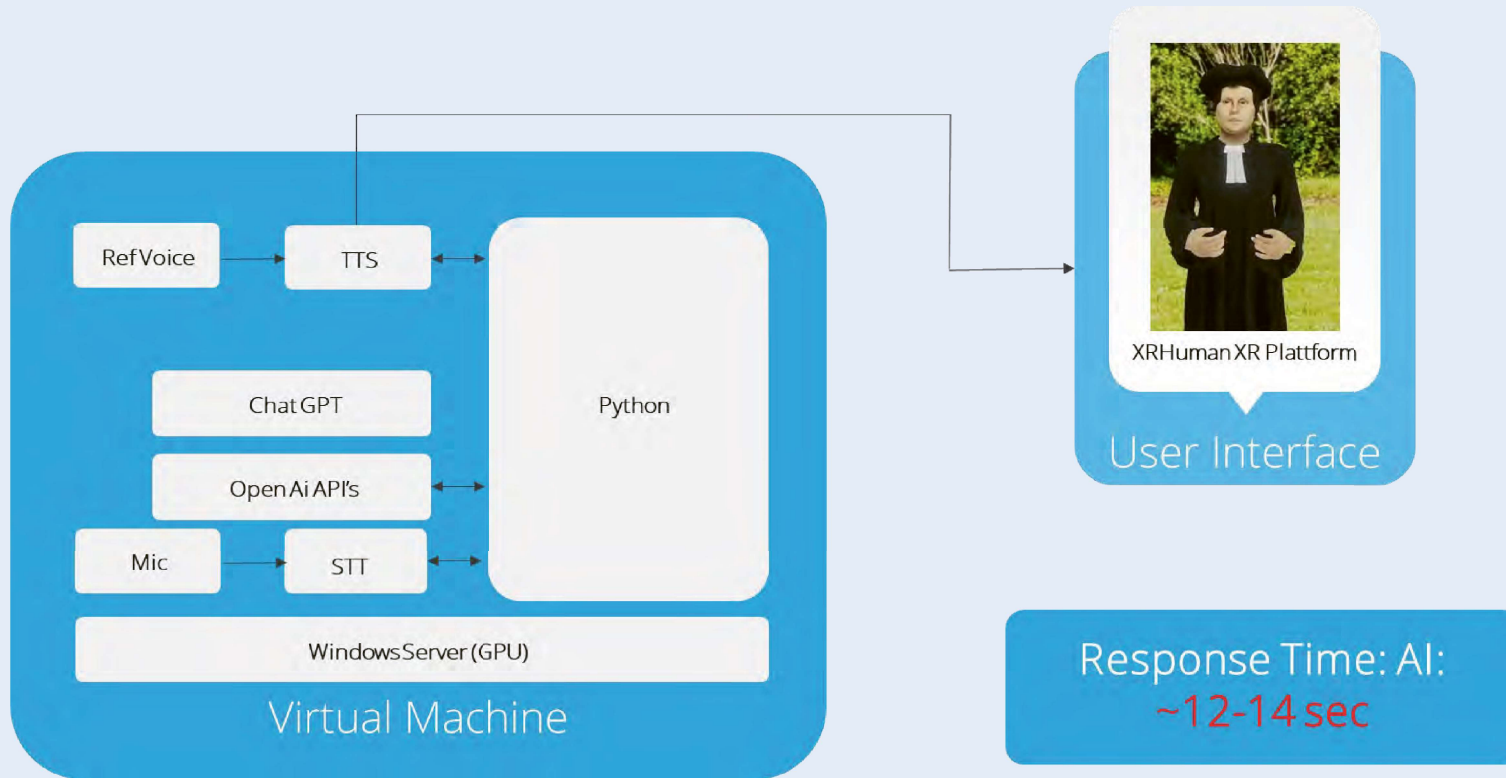


# Technical Background: XR & Avatars as a Service





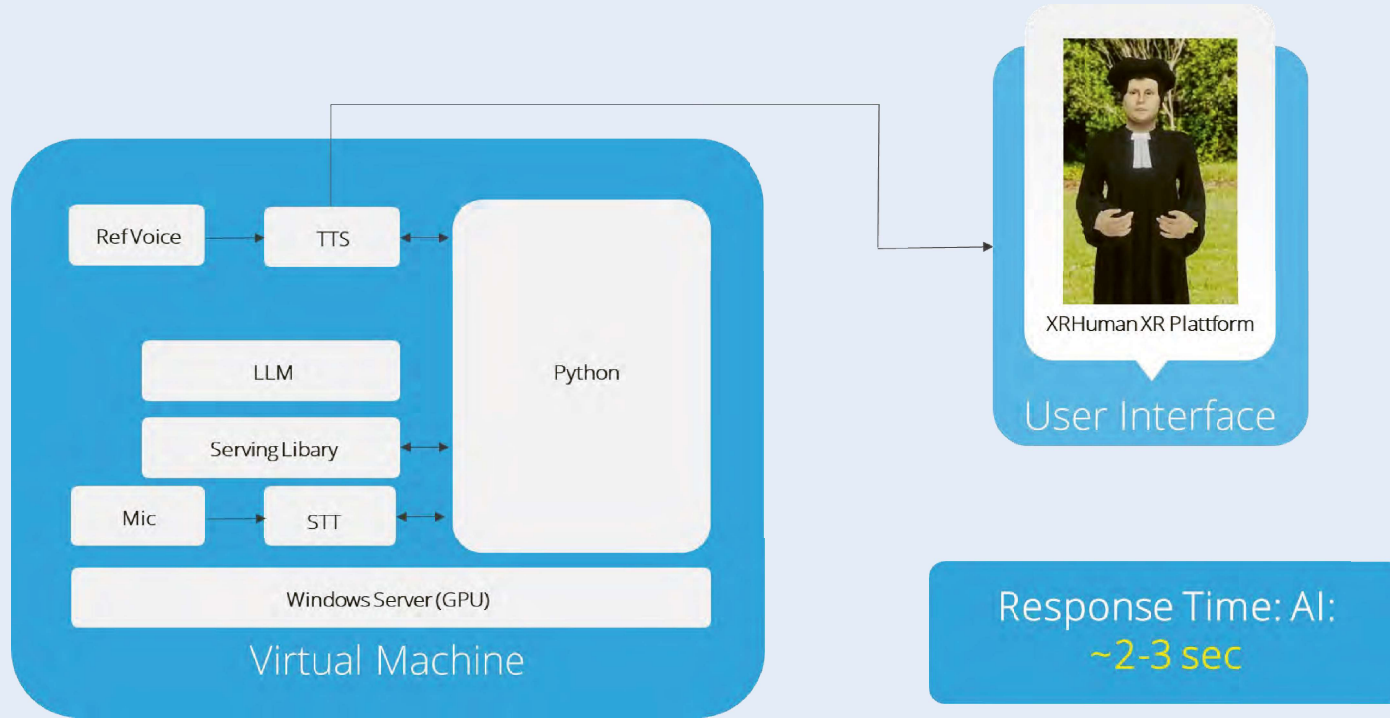
# Tech Stack & APIs Open Ai



## Advantages:

- Market leader
- Mature LLM models
- Integration of foreign languages
- Easy access

# Tech Stack: Open Source and OTC



## Advantages:

- Low latency
- Cost advantage when scaling
- GDPR compliant
- Data sovereignty
- Transparency
- Easy access

# Project Development

- Replacing the Metaverse client with a browser
- Choosing an LLM and uploading training data
- Evaluating the LLMs
- Implementing safeguards against unwanted responses from the avatar
- Integrating XR
- Offering the Martin Luther Avatar as a service

### 3. Technological Challenges

- **Control of AI / LLMs:** Custom GPTs are managed and controlled by ChatGPT to ensure responsible usage and adherence to guidelines.
- **Training of LLMs:** Who is responsible for training and fine-tuning? Can a specific community significantly influence the future outputs of the AI?
- **Elimination of Possible Bias / Hate Speech and Counteracting Measures:** Can we make it transparent when parameters are set to avoid bias, hate speech, or unwanted responses?

## 4. Theological Challenges

- Clarified Questions: We may not have easy answers, but our questions have become clearer.
- Purpose of the Experiment: We aim to refine our questions and discover the underlying important issues.

# Ownership and Representation of an Avatar's Personality (1)

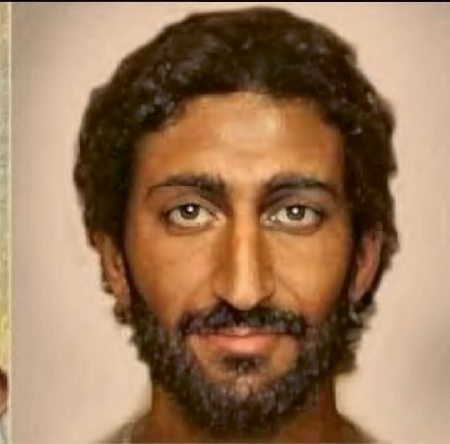
- A key ethical issue is the ownership and representation of the avatar's personality.
- In this experiment, the AI was programmed to exclude antisemitic responses, aligning more with modern Protestant ethics while omitting controversial aspects of Luther's later years.
- This programming approach allows the avatar to potentially represent various theological positions within Lutheranism, such as pro or anti-LGBTQAI+ stances.



# Ownership and Representation of an Avatar's Personality (2)

- **Ownership and Portrayal of Historical Religious Figures:** Complex questions arise regarding the ownership and portrayal of historical religious figures today: Who owns an avatar and who has the authority to define its personality? Do we present a „sanitized“ version of the person?
- **Control of AI Fine-Tuning:** Who controls the fine-tuning process of the AI? Is it the programmers, the community, pastors, or the denomination?

# From Martin Luther to Jesus?



## COLONIZER JESUS vs HISTORICAL JESUS

- WHITE
- CHRISTIAN
- PATRIOTIC
- JUSTICE THROUGH RETRIBUTION
- DIED FOR YOUR SINS
- SENDS SINNERS TO HELL
- SILENT IN THE FACE OF OPPRESSION
- CONDEMNS SINNERS
- ENDORSES CHURCH AND STATE
- A KING
- UPHOLDS TRADITIONAL FAMILY UNIT
- ENDORSES HOLY WAR

- MIDDLE-EASTERN BROWN SKINNED
- JEWISH
- COLONIZED BY ROME
- JUSTICE THROUGH RESTORATION
- KILLED BY CHURCH AND STATE
- FRIEND OF SINNERS & OUTCASTS
- LIBERATES THE OPPRESSED
- CRITIQUES RELIGIOUS PEOPLE
- SUBVERTS EMPIRE
- HOMELESS MAN & CHILD REFUGEE
- HAD HALF SIBLINGS
- NON-VIOLENT

## A Jesus Avatar? (1)

- Technically feasible, theologically challenging.
- What is the avatar's skin color? Black or white? What about size and physiognomy?
- Which sayings of Jesus/data about Jesus are the basis for the LLM? Ipsissima verba? Red letter verses? Words of Jesus derived from historical-critical research? Or secondary content, for example, from sermons about Jesus?

## **A Jesus Avatar? (2)**

- Who controls the Jesus avatar?
- WWJD? Traditionally, praying means communicating with God. Can interacting with the Jesus avatar be considered prayer?

# Thank you



## Partners & Team



# Live Demo of XR AI Martin Luther – Please bear in mind:

- We use ChatGPT for this demo through an API to provide easy access to English. This significantly increases latency compared to AI that runs on the same cloud server as the avatar and uses streaming technology.
- To prevent the avatar from interacting with other conversations occurring in the metaverse, it needs to be activated. A green halo indicates readiness; yellow means listening; blue signifies thinking; red indicates responding.
- Transmission via Zoom may reduce the quality of video and audio.

