

# Anwendung von Hardware-Raytracing zur Optimierung der Treffererkennung

Bachelorkolloquium

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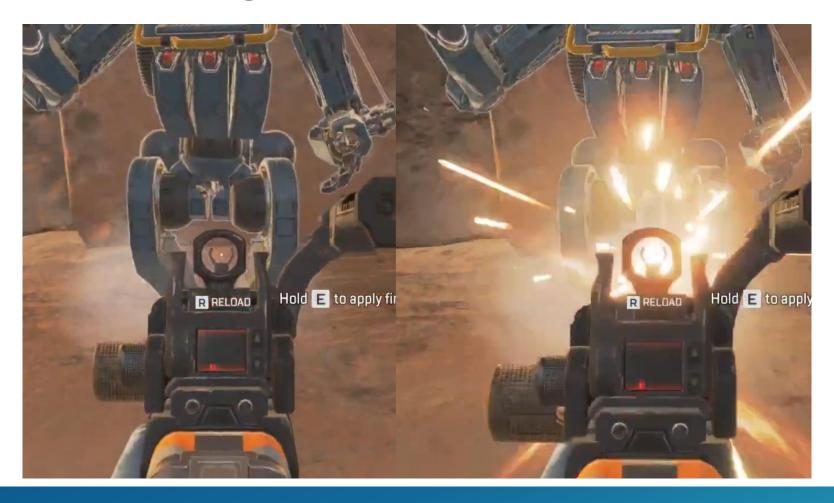
#### Gliederung

- Motivation
- Problemstellung
- Konzept
- Realisierung
- Ergebnisse
- Ausblick

#### Motivation



### Problemstellung



### Konzept



# Konzept

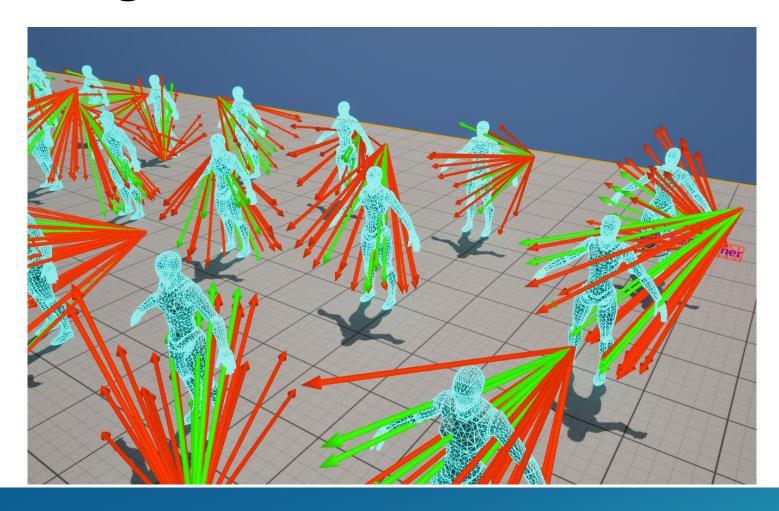
Testszenario 1	Testszenario 2
1 Strahl pro 3D-Modell	24 Strahlen pro 3D-Modell
Single-Threaded	Multithreaded

#### Realisierung

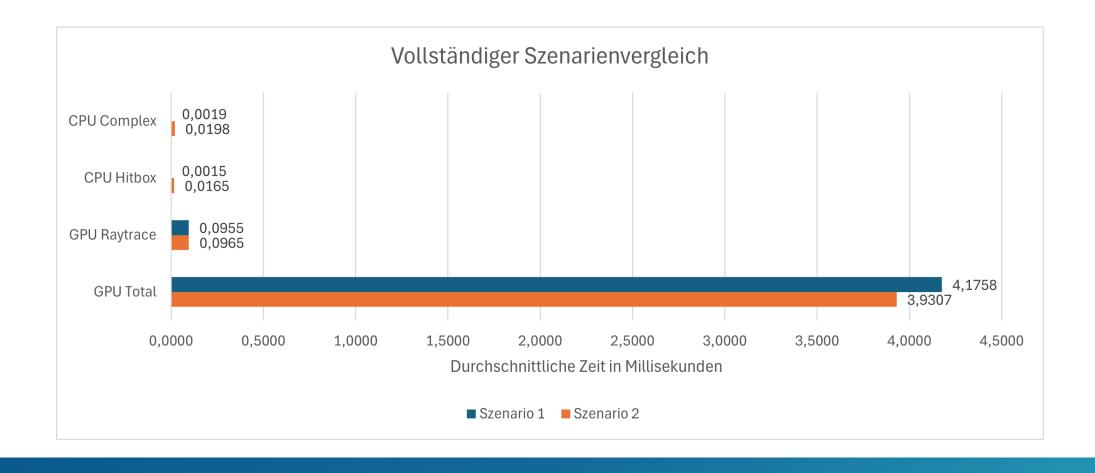
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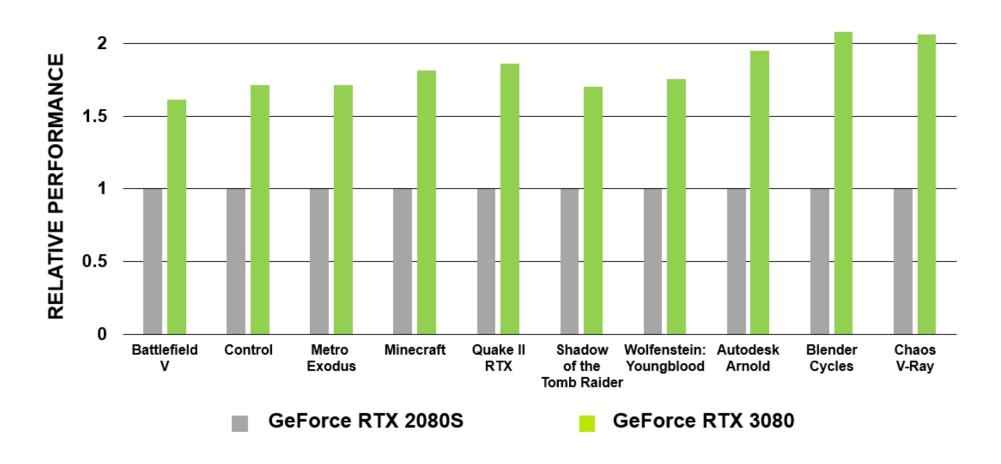
## Realisierung



#### Ergebnisse



#### Ausblick



#### Ausblick



# Vielen Dank für Ihre Aufmerksamkeit! Fragen?

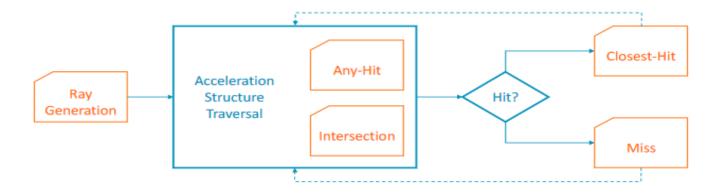
# Appendix

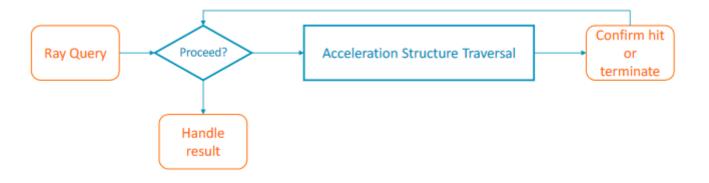
#### Grundlagen

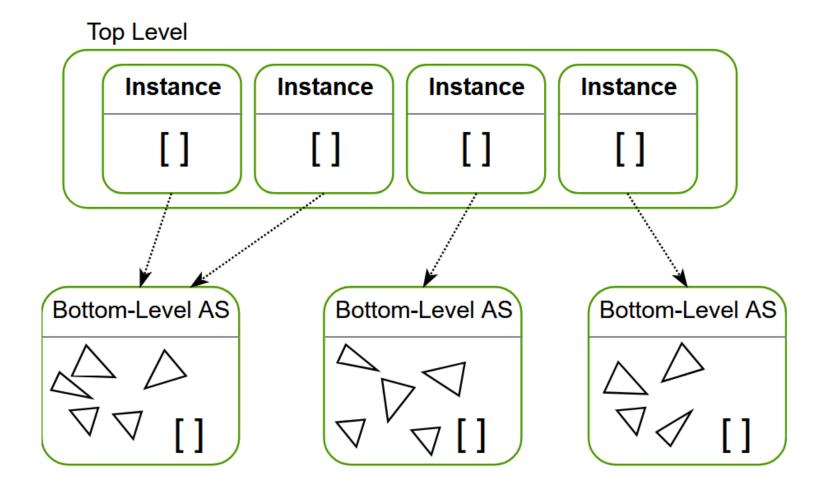


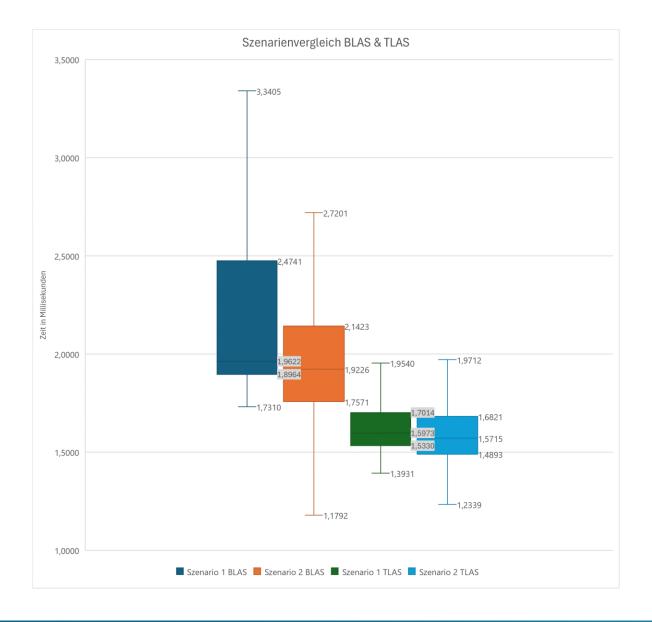


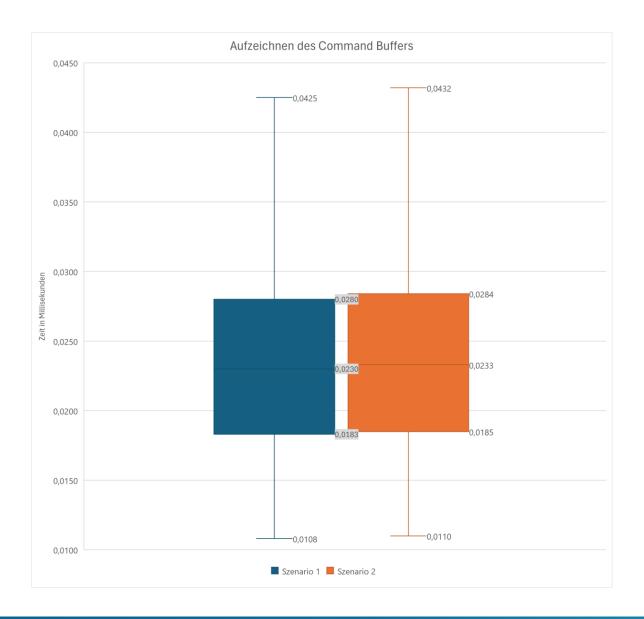


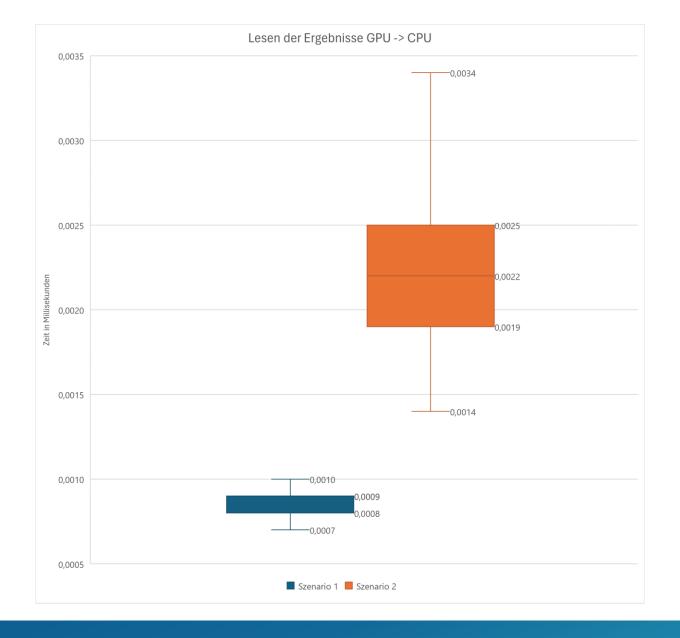


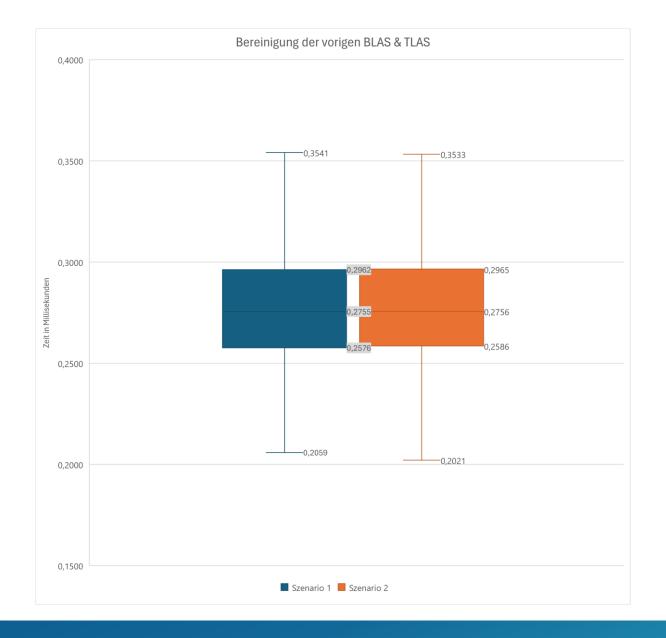


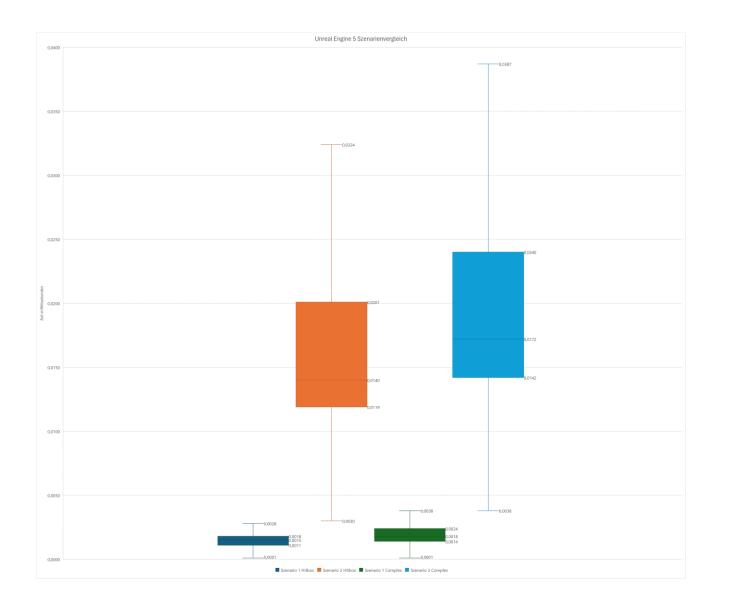




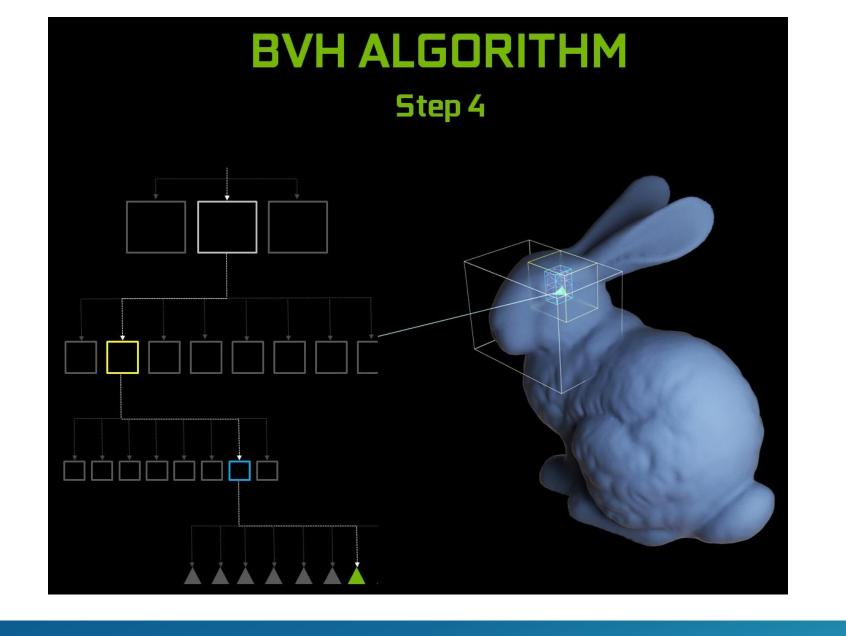


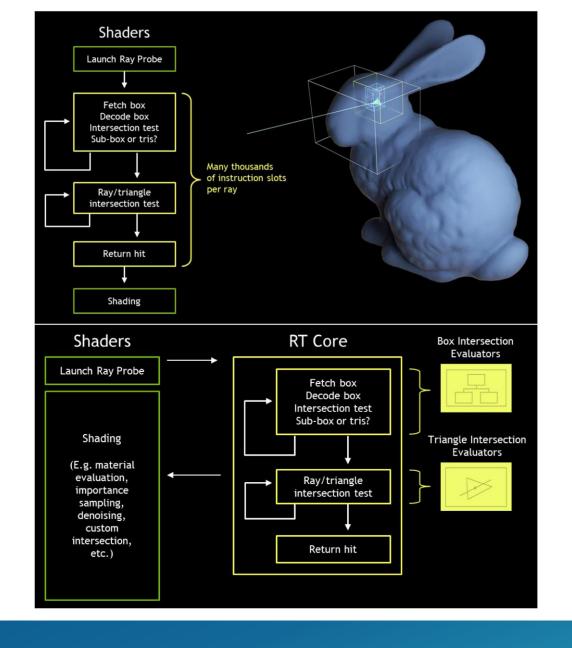












#### Quellen

- https://counterstrike.fandom.com/wiki/Hitbox?file=Hitboxes\_comparison\_old\_new.png
- https://www.youtube.com/watch?v=1EuZEmoRU4A
- <a href="https://www.nvidia.com/content/PDF/nvidia-ampere-ga-102-gpu-architecture-whitepaper-v2.1.pdf">https://www.nvidia.com/content/PDF/nvidia-ampere-ga-102-gpu-architecture-whitepaper-v2.1.pdf</a>
- <a href="https://www.informatec.com/de/machine-learning-maschinelles-lernen">https://www.informatec.com/de/machine-learning-maschinelles-lernen</a>
- https://en.wikipedia.org/wiki/File:Vulkan\_API\_logo.svg
- https://de.m.wikipedia.org/wiki/Datei:Opengl-logo.svg
- https://www.unrealengine.com/en-US/branding