EVERYTHING STARTS WITH A PASSION
SHORTFILMS / STORYTELLING
A MAN'S GOTTA PAY THE BILLS
Porsche E-Performance
GPU Rackserver G48
Dual Xeon E5-2640 v4 2.4GHz
RAM 64GB
8 Nvidia 1080 Ti
CAD? BRING IT ON

Render time per frame: 6m with Max. noise of 0.007 and 4000 paths/pixel
Hardware used: GPU Rackserver with 8 Nvidia 1080 Ti
DOF?

Render time per frame: 5m with Max.noise of 0.007 and 4000 paths/pixel
Hardware used: GPU Rackserver with 8 Nvidia 1080 Ti
20K? I'VE GOT YOUR BACK

Render time per frame: 55m with Max. noise of 0.007 and 2000 paths/pixel
Hardware used: GPU Rackserver with 8 Nvidia 1080 Ti
10K ON THE FLY

Render time per frame: **28m** with Max.noise of 0.007 and 4000 paths/pixel

**Hardware used:** GPU Rackserver with 8 Nvidia 1080 Ti
VOLUMETRIC / MATTE SHADOW

Backplate = Render time per frame: 5m with Max.noise of 0.007 and 4000 paths/pixel
Car = Render time per frame: 3m with Max.noise of 0.007 and 3000 paths/pixel
Volume = Render time per frame: 4m with Max.noise of 0.005 and 4000 paths/pixel

Hardware used: GPU Rackserver with 8 Nvidia 1080 Ti
DIRECTIONAL LIGHTS

Car: Render time per frame: 5m with Max.noise of 0.007 and 3000 paths/pixel
Volume: Render time per frame: 2m with Max.noise of 0.005 and 4000 paths/pixel
Hardware used: GPU Rackserver with 8 Nvidia 1080 Ti
PRODUCTION? ON RT?

Render time per frame: **7m** with Max. noise of 0.007 and 4000 paths/pixel
Hardware used: GPU Rackserver with 8 Nvidia 1080 Ti
PRICE
2X HP Z840 Workstations
Dual Xeon E5-2690V4 2.6 GHz
RAM 32GB
Price: $7,670 \times 2 = 15,340$

1X GPU Rackserver G48
Dual Xeon E5-2640 v4 2.4GHz
RAM 64GB
8 Nvidia 1080 Ti
Price: $14,181
**CPU VS GPU**

**Xeon E5-2690v4 2.60GHz**
Price: 2.026,85 €

**GTX 1080 TI Founders Edition**
Price: 710,51 €

Price source: http://www.mindfactory.de
**CPU VS GPU**

**Xeon E5-2690v4 2.60GHz**  
Price: $4 \times 2.026,85\,\text{€} = 8107.40\,\text{€}$

**GTX 1080 Ti Founders Edition**  
Price: $8 \times 710,51\,\text{€} = 5684.08\,\text{€}$

Price source: [http://www.mindfactory.de](http://www.mindfactory.de)
Xeon E5-2690v4 2.60GHz
Price: 4* 2.026,85 € = 8107.40 €

GTX 1080 Ti Founders Edition
Price: 12* 710,51 € = 8526.12 €

Price source: http://www.mindfactory.de
SUSTAINABLE GROWTH

2015
4 * GTX TITAN X
12288 CUDA Cores

2016
8 * GTX 1080
20480 CUDA Cores

2017
12 * GTX 1080 TI
43008 CUDA Cores
PERFORMANCE
Vray ADV CPU vs VRAY RT Cuda Image Quality: 11.3 (Using Image Quality Calculator from ImageJ)

**CPU**
- 48m

**GPU**
- 8m

up to 8X faster
Vray ADV CPU vs VRAY RT Cuda Image Quality: 11.3 (Using Image Quality Calculator from ImageJ)

CPU: 45m
GPU: 5m

up to 9X faster
Vray ADV CPU vs VRAY RT Cuda Image Quality: 11.3 (Using Image Quality Calculator from ImageJ)

CPU: 19m
GPU: 1m

up to 19X faster
TIME OPTIMIZATION
WORK WHILE YOU RENDER
LEARNING CURVE
LEARN FASTER, WORK SMARTER
DEADLINES
I DON´T NEED TIME, I NEED A DEADLINE...
PLAY BY YOUR OWN RULES
15360*5400px it's equivalent to 40 Full HD pictures